This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

NEBR TRANSFER
HN 6FET I

Digitized by Google

23.4
KC 3456

RULES OF THE
OSTON LIBRARY.
FRANKLIN PLACE.

CANCELLED
19 D
418

out a
is not
of th
long
If
same
volun
be pa
have
compl
Th
and S
in Wi
If a
shall b
Tha
at the
first ta
the M
Librar
any pe
assessm
That
on or

Not more than THREE volumes shall be taken out at the same time, and no books shall be permitted to be taken or used, but by the owner of a share or his family.

For the first year after the admission of a Book, a fine of ten cents is incurred for each Library-day it may be kept beyond the time limited on the cover; and after that time, of seventeen cents per week, if detained beyond five weeks;—for abuse of Books, the value thereof when new. If any Book be lost, the same must be replaced by a similar volume, or by paying the current price of a new volume; if it be part of a set, the remainder must be taken, paying the current price of a new set.

THREE DOLLARS assessment must be paid previous to the delivery of *any Book*, after the annual meeting.

ALL Books must be returned into the Library ten days previous to the annual meeting, which is always on the second Friday of June, for inspection; fine for non-compliance is one dollar.

Books must be called for by their numbers, and not by their titles.

The Library is opened every, Tuesday, Thursday, and Saturday afternoons, from 3 to 6, in summer; and 3 to 5, in winter;—
...turday forenoon, from 10 to

...hall be allowed to go within
... to take down any Book,
...ecial leave of the Librarian.

Google

...resent price of a share is 25 dollars.

45128
41.8

Digitized by Google

Digitized by Google

Digitized by Google

View of St. Salvador.

Digitized by Google

THE

WONDERS

OF

NATURE AND ART;

OR,

A CONCISE ACCOUNT

OF

WHATEVER IS MOST CURIOUS AND REMARKABLE

IN

THE WORLD;

Whether relating to its Animal, Vegetable, and Mineral Productions, or to the Manufactures, Buildings, and Inventions of its Inhabitants:

Compiled from Historical and Geographical Works of established Celebrity, and illustrated with the Discoveries of modern Travellers.

By the Rev. THOMAS SMITH,

Author of the UNIVERSAL ATLAS, SACRED MIRROR, &c. &c.

"Review these numerous scenes, at once survey
Nature's extended face, then Sceptics say,
In this wide field of wonders, can you find
No art discover'd, and no end design'd?"

VOL. X.

LONDON:

PRINTED FOR J. WALKER, NO. 44, PATERNOSTER-ROW; J. HARRIS, CORNER OF ST. PAUL'S CHURCH-YARD; VERNOR AND HOOD, IN THE POULTRY; T. HURST, PATERNOSTER-ROW; AND CROSBY AND CO. STATIONERS-COURT.

1804.

Digitized by Google

KC 3456

HARVARD
UNIVERSITY
LIBRARY
MAR 5 1941

Bryer, Printer, Bridge Street, Blackfriars.

Digitized by Google

CONTENTS.

BRITISH MUSEUM 1940

PART IV.

AMERICA.

CHAP. II.

OF NORTH AMERICA 1
Customs, Manners, Religion, and Government ib.
Commerce, Inventions, Manufactures, &c. . . . 61

CHAP. III.

OF THE WEST INDIA ISLANDS . . . 80
Climate, Soil, Mountains, Springs, Lakes, &c. . 81
Vegetables 132
Animals 163
Buildings, &c. 187
Commerce, Fisheries, &c. 199

NEW DISCOVERIES.

CHAP. I.

OF THE OTAHEITEAN ISLANDS . . 209
Historical Account of the Discovery . . . . ib.

Digitized by Google

General Aspect, Climate, and Productions . . 239
Customs, Manners, &c. of the Inhabitants of the Otaheiteap Islands 243
Arts, Sciences, Manufactures, and Agriculture 270

Digitized by Google

WONDERS

OF

NATURE AND ART.

CHAP. II.

OF NORTH AMERICA.

(Continued.)

Customs, Manners, Religion, and Government.

BETWEEN Hudson's Bay and California, there are several tribes of Indians, some of whom are known to Europeans, particularly the *Neheth-aw-a* Indians, the *Assinne pætues*, the Fall Indians, the *Sassuees*, the Black feet Indians, the Blood Indians, and the *Paegans*.—These are names given by themselves; and there are Spanish traders settled among them from the other side of the continent, making their inland excursions from California, as the English do from Canada and New Britain.

The usual dress of these Indians consists of a pair of stockings, made of pliable leather; a sort of loose jacket with sleeves of the same kind, and over all a drest buffalo-skin. Young men dress their hair in different forms, and paint their faces according to their fancies; but older persons seldom tie their hair or paint their faces. A drest

Digitized by Google

otter-skin, however, is usually wound round their heads, and the ends are suffered to hang down the back. The women's dress is nearly similar.

All these Indians are much inclined to a lean habit of body, and are, in general, very swift of foot. Charlevoix tells us of one man who assured him, that before he had eaten any bread he could walk forty miles a day without fatigue, but that since he had been used to bread, he could not travel with the same ease.—As their country abounds with innumerable herds of deer, elks; and buffaloes, they frequently make great slaughter among them, from a ridiculous opinion that the more they kill, the more they have to kill; and to this notion they are enthusiastically bigotted, though they sometimes find the folly of it to their cost, suffering occasionally such extreme hunger through it, that parents have been reduced to the sad necessity of devouring their own offspring. Yet they have a philosophy that reconciles all this, and a degree of composure superior to most men. An Indian after being out a whole day upon the hunt, exposed to the bleakest winds, without any thing to satisfy the calls of nature, comes home, warms himself at the fire, smokes a few pipes of tobacco, and then retires to rest, as calm as if in the midst of plenty. This, however, does not proceed from insensibility; for if he happen to have a family, and that family be reduced to extremity of want, his affection gets the better of his philosophy, and he immediately abandons himself to the most pungent sorrow. Even then, however, he imputes his distress to supernatural causes, and to the capricious will of some invisible agent, whom he supposes to preside over all his undertakings.

Digitized by Google

The country they inhabit is very wild and uncultivated, but not so much as that which they chuse for hunting. It is a long march to reach it, and they carry on their backs all they want for five or six months, through ways so frightful, that one would scarcely suppose any thing but wild beasts would come there. In the hunting season, they encamp on a certain spot, erecting a temporary cabin, with poles fixed in the snow, and covering it with bark in a conical form.—The erecting of these cabins is the work only of half an hour. The snow heaped around them, forms a sort of wall which the winds cannot penetrate, and under the shelter of this wall, the poor inmates sleep on a bundle of pine branches as sweetly as on a bed of down.

In these expeditions, the Indians are followed by a great number of dogs, which are remarkably faithful, and, for the most part, are bold and skilful hunters. Their masters taking little care to feed them, they are always very lean; and having little hair on their backs, they are so sensible of the cold, that if they cannot get at a fire, they will lie down upon the first Indian whom they approach.

The Indians rely much upon physiognomy, and perhaps there are no men in the world who are better judges of it; for they study only pure nature and have none of that respect for certain individuals which so frequently seduces civilized nations. Free from the considerations of interest and ambition, the equality of conditions is by no means essential to the support of their society. They have, perhaps, less delicacy of sentiment than the polished sons of Europe, but they have certainly more justness. The blessed influences of religion alone can bring the amiable qualities of this people to per-

Digitized by Google

fection, and cure their evil ones; but even at present an attentive observer may find, in their most indifferent actions, some vestiges of the primitive religion, which is probably more effaced through want of instruction than altered by a mixture of superstitious forms and fabulous tradition.

Their mode of dividing time is by months, some reckoning twelve, others thirteen; but they have not any distinction of weeks, nor any names for particular days: yet they have four fixed parts in each day, viz. sun-rise, noon, sun-set, and midnight. They have no chronological computations, and if they preserve the memory of certain great events, they cannot tell the exact time since they happened. In counting, they reckon the units from one to ten, the tens by ten to a hundred, and the hundreds by ten to a thousand; but beyond this they cannot go.

Their principal amusements are the game of the dish, the game of the straws, and that of the bat, besides a variety of dances.—The game of the dish is played by two persons, each of whom has eight little bones with six unequal surfaces, two of which are painted black. They make them jump up by striking the ground with a hollow dish in which they are contained, or if they have no dish, they throw them up into the air with their hands. If in falling they come up all of one colour, the thrower wins five: the game is forty up, and they subtract the number gained by the opposite party. Five bones of the same colour wins one for the first time, and the second time they win the game; but a smaller number wins nothing. Whole villages are sometimes concerned in this game, and each party chuses a marker. The players appear wild with agitation,

Digitized by Google

and the spectators are little more calm. They all make a thousand contortions, talk to the bones, and load the genius of the adverse party with imprecations; and if all this prove ineffectual to recover their luck, they break up the assembly and appoint a new trial.

It sometimes happens, that these parties of play are made by order of the physician, or at the request of a sick person in hopes of a cure. There needs no more for this purpose than a dream of one or the other, which is always regarded as the order of some spirit. They then prepare themselves for play with a great deal of care; assemble for several nights, to try who has the luckiest hand, consult their genii, and fast, in order to obtain favourable dreams; and he whose dream is supposed most favourable is appointed to stand next him who holds the dish.—At this game, the Indians will frequently hazard all they possess, and many will not quit it till they are completely stripped even of the furniture of their little cabins.

The game of straws is played thus: Two hundred and one small reeds, about the size of a wheat straw and six inches long, are shuffled together; and the players after many contortions and invokings of their genii, separate them into nine parcels of ten each, and one of eleven. Every one then draws a parcel, and he who gets that containing eleven straws, wins the point agreed on; the whole game is sixty or eighty.

The game of the bat is played with a ball, and bent sticks, ending in a kind of racket. Two posts are set up at a certain distance, according to the number of players, as bounds. The players are then divided into two bands, each having a

certain station, and their business is to strike the ball to the post of the adverse party without either letting it fall to the ground or touching it with the hand, for in either of these cases the game is lost; and they are so extremely dexterous in catching the ball with their bats, that sometimes one game will last for several days together.

Of their dances the first is merely for diversion. As soon as night approaches, they assemble in a large cabin, and set up several posts in a ring, in the middle of which sit the musicians, whilst a packet of down of various colours is fastened to every post. The young women wear a tuft of coloured down in their bosoms, and whilst the company are dancing, a young man steps out of the ring from time to time, takes from the posts a little of the down of which the girl he admires has some in her bosom, and, putting it on his head, appoints her a place of rendezvous.

Another dance, called the *fire dance* is performed by five or six women to the sound of a drum and a chichikoué, which is a sort of calabash containing some pebbles, in the manner of a rattle. The dancers assemble in a cabin by fire light, and having ranged themselves in a line with their arms hanging down, they sing and make some steps in cadence backwards and forwards. After they have danced some time, the fire is put out, and an Indian begins to dance with a lighted coal in his mouth, which makes him look like a spectre. The mixture of dancing, singing, and music, and the fire of the coal, which continues nearly half an hour, has something extremely odd and savage in it; though at a certain distance, the voices of the male

Digitized by Google

and female singers have a very pretty effect.—The art of keeping the burning coal in their mouths is a profound secret; but it appears, that on these occasions they rub the inside of their mouths with a particular plant.

Their other dances are military, and one of them in particular may be called a military fête.—The warriors are the performers, and it seems instituted merely to give them an opportunity of publishing their warlike atchievments. The calumet being decorated with feathers, and set up in a conspicuous place, the musicians are placed around it; and at a little distance a post is erected, on which, at the end of every dance, a warrior gives a stroke with his hatchet, and repeats some of his most noble exploits: then, having received the applause of his auditors, he resumes his place and the dance is renewed.

The dance of discovery is performed by one man, and is a natural representation of all that passes in a military expedition. At first he advances slowly into the midst of the place, where he remains for some time motionless; after which he represents the setting out of the warriors, the march, the order of encamping, &c. He goes on to the discovery, makes his approach, and stops to take breath; then all on a sudden he takes one of the company as prisoner, makes a show of knocking another man's brains out, levels his gun at a third, and afterwards begins running with all his might, to represent a retreat. Then he expresses, by different cries, the various affections of his mind during his last campaign; and finishes by reciting all the brave actions he has performed in war.

There are other dances of a more simple nature,

Digitized by Google

which seem merely designed to give the warriors an opportunity of relating their military exploits. He who gives the feast invites all the village to assemble round his cabin, where the warriors dance, one after another; and at the end of each dance they proclaim their most gallant atchievments, which are generally crowned with shouts of applause; but if any individual happen to boast of feats he never performed, it is customary for some of the company to blacken his face with dirt, saying, "We do this to hide your shame, for the first time you meet an enemy you will turn pale."—This dance is invariably performed at night.

Among some of the Indian tribes is performed the dance of the bull; in which the dancers form several circles, and the musicians are placed in the middle. The dancers do not join hands, but every one carries in his hand his arms and buckler. All the circles turn different ways, and caper extremely high; yet they always keep good time and measure.—From time to time, the chief of a family presents his shield, which is covered with a bull's hide; and whilst the dancers strike upon it, he recounts some of his exploits. Then he cuts a piece of tobacco from a post where some is hung, and gives it to one of his friends, but if any person can prove that he has performed greater feats than those the other boasts of, he has a right to take the piece of tobacco that was presented, and give it to another.

As we have already observed that the Canadian Indians subsist principally by hunting, we shall here give a description of their bear hunt, which holds the first place in this part of their employ, and which, among those who are not converted

Digitized by Google

to Christianity, is performed with great superstition.

It is always a war-chief who fixes the time of the chace and has the care of inviting the hunters. This invitation is made with great ceremony, and is always followed by a rigid fast, in order to induce their genii to discover the places where they may find many bears; some of them indeed will even cut their flesh in several parts of their bodies, and practise many other austerities, to render their genii more propitious: they do not, however, ask assistance to conquer the animals, but wish only to be told where to find them.

The fast having been duly kept, and the place of hunting appointed, they assemble at a feast, where the chief relates his prowess at former huntings; and when the repast is finished they make a solemn invocation to the manes of the animals previously killed. Then they begin their march, amid the acclamations of a whole village; for the chace among these people is accounted so honourable an employment that the alliance of a good hunter is generally preferred to that of a famous warrior.

When the hunters think they have arrived at a place where a great number of bears are concealed, they form a circle of a quarter of a league in circumference, and gradually draw nearer and nearer, till at length they close quite in upon the animals and take them.—When a bear is killed, the hunter puts the end of his lighted pipe into his teeth, blows into the bowl, and thus filling the mouth of the animal with smoke, conjures its spirit to bear him no malice, and not to oppose him in his future huntings. But as no answer is

returned, the hunter cuts the string under the bear's tongue, and on his return to the village, throws it into a fire, when its crackling and shrinking up are regarded as infallible tokens that the spirit of the animal is appeased.

In hunting buffaloes various methods are adopted by the Indians; but the greatest number of these animals are taken in pounds, which are either of a square or circular form, according to the fancy of the tribes by whom they are constructed. The square ones are composed of trees, laid one upon another to the height of about five feet, each square side being fifty feet long. On that side where the animals are to enter, a bank of earth is raised with an easy descent, so as to be on a level with the top of the enclosure, or the other side of the square. Several branches of trees are then placed, in a straight line, from the raised bank to the distance of a hundred and ten feet, the lines spreading continually from each other, so as to be two hundred feet apart at the distance of one hundred feet from the pound. These lines of trees are lengthened out by a number of poles about fifteen feet long, with a piece of buffalo dung on the top of each, whilst a certain number of men lie concealed in buffalo skins, to drive the animals in a straight direction to the pound.

Every preparation being made, three or four men set off on foot to find a herd of female buffaloes, and having discovered them, they drive them along to the neighbourhood of the pound; when the other Indians assemble on horseback, but keep at a proper distance so as not to frighten the animals. Thus they are conducted within the poles, and when any of them attempt to

Digitized by Google

Digitized by Google

Digitized by Google

run out, the men who are placed at the bottom of each pole shake their skins, and frighten them back, till at length they are driven up the bank into the pound; where, falling headlong, some break their necks, some their backs, and others their legs, and the confusion within becomes so general, that none of them can make an escape.

There are few people that have less need of physic than the Indians of North America; for they are not only, for the most part, of a healthy vigorous constitution, but the gout, gravel, stone, apoplexy, and many other European diseases are totally unknown to them. If they are at any time indisposed they apply to their jugglers, who are, at best, no better than quacks, and have a singular method of not being answerable for events. As soon as they perceive a patient has any symptoms of death, they never fail to prescribe things too difficult to be put in execution; so that they can always excuse themselves by saying, that their orders were not punctually followed.—Some persons forsake the diseased when the doctors give them over, and let them die with hunger and thirst; and there are others who to hinder the distortion of the features in dying persons, close their eyes and mouth when they see them in the last agonies.

Notwithstanding these people show so little judgment in their manner of treating the sick, they behave towards the dead with a degree of tenderness and respect which cannot be too much admired.—Some mothers have been known to keep the bodies of their children for years, frequently opening their coffins to change their dress, and even depriving themselves of food to

Digitized by Google

carry it to those places where thei spirits are supposed to walk.

As soon as a sick person expires, the place is filled with hideous cries and lamentations, which are continued as long as the family can afford to keep open table; and in the mean time, the dead body, finely drest and painted, is exposed at the cabin door, in the posture it is to be laid in the tomb.—The custom of some tribes is, for the relations of the defunct to fast till the end of the funeral: and all this interval is passed in lamentations, in treating the visitors, and in mutual compliments.

The body is carried to the place of sepulture without much ceremony, but it is deposited in a little cave, lined with skins, and much better adorned than any of the cabins, and especial care is taken to cover it in such a manner that the earth shall not touch it. A post is then erected over the grave, and a number of things hung upon it, in token of esteem for the deceased. Fresh provisions are also brought to the spot for several mornings, and are supposed to be eaten by the spirit of the deceased; though in reality they are devoured by dogs and other animals.

When any one dies in hunting, his body is exposed on a high scaffold till the departure of his companions, who carry it with them to the village: and the bodies of those that fall in war are burnt, and their ashes brought back, to be deposited in the burial place of their ancestors.—In some places they observe a very singular ceremony for those that are drowned, or frozen to death.—The preliminaries of tears, mournful dirges, &c. being ended, they carry the corpse to the place of interment, where they dig a large

Digitized by Google

pit, and make a fire in it: then some young persons approach the body, cut out the flesh, in parts previously marked out, and throw them into the fire, together with the bowels. During this horrid operation, the female relatives walk round those who are engaged in it, exhorting them to complete what they have undertaken.—The interment is followed by presents to the afflicted family, and the ceremony is terminated, as among the ancient Pagans, by songs and shouts of victory. It must be observed, however, that the relations of the deceased bear no part in these rejoicings, but observe, even after the obsequies, a very strict mourning.

There are three nations of Indians in California who speak three distinct languages, but they are all nearly similar in appearance, being well formed, robust, vigorous, and of a healthy countenance. The males, whether children or adults, go almost entirely naked in all parts of the peninsula; but there is some diversity in the ornaments used by each nation. In the southern parts, they decorate their heads with strings of pearl, braided with their hair and interwoven with small feathers, the whole forming a very curious ornament. The nation of Loretto generally wear a becoming girdle round their waists, and a curious fillet of net-work on their foreheads; to which some add a sort of neck-cloth, ornamented with tolerable imitations of small round fruits, which bear some resemblance to a rosary. The Cochines of the north usually wear their hair short, and have a kind of diadem formed of several bands of nacar; to compose which they first detach the mother of pearl from the shell, give it a fine polish on both sides, and divide it

Digitized by Google

into small pieces, which are afterwards perforated for the conveniency of stringing.

The garments of the women consist of three pieces, two of which form a petticoat, reaching from the girdle to the feet, and the third a short cloak, which covers the body from the shoulders. These pieces, which are made from palm threads, are not woven, but fastened at the top as in fringes, and hang down in thick skains and tufts. The Indian women of Cape San Lucas wear their hair long, loose, and spread on their shoulders; but their head-dress, like that of all the other women of California, consists of a piece of net-work, made with great ingenuity.—The women of the northern parts wear meaner garments, being covered only from the waist to the knees; and their petticoat, which is made of thin pieces of sedge, cut off at the knots, and fastened together with threads, merely serves to hide their nakedness, without defending them from the inclemencies of the weather.

The houses of the Californians make no better appearance than their habits. Those of every *ranchiera* or village, are merely wretched huts, situated near some water, and when there is a necessity of removing to other places in quest of subsistence, the inhabitants easily shift their station. Wherever they stop, they shelter themselves under the trees, from the scorching heat of the sun by day, and the coldness of the air at night. In severe winters they live in caverns, which they either dig themselves, or find in the sides of the mountains; and it is a remarkable fact, that they obstinately refuse to reside in more comfortable dwellings, which have been erected for them by the missionaries.

Digitized by Google

Digitized by Google

Digitized by Google

The Californians admit of a plurality of wives, who provide for the family, and procure a sufficient quantity of fruits from the woods to keep their husbands in good humour; for if once they are discarded no other man will take them.—Adultery is accounted a capital crime, except at the festivals and wrestling matches among the ranchieras, when it is the privilege of the victors. Among the Cochines of the north, however, scarcely any such excesses are known, and a missionary, speaking of his district, says, that amidst all the freedoms of these Indians, debauchery and illegal amours are very rarely seen.

The manner of negociating marriages in the nation of Loretto, which inhabits the middle part of California, is to present the bride with a batea or jug, her acceptance of it denotes her consent; and on her presenting the man with a net for his head, the marriage is confirmed. In the other nations the agreement is concluded at an entertainment to which the lover invites the whole ranchiera; but after all this solemnity of contract, the slightest motive sometimes annuls it.

The time of gathering the pitahayas is the vintage of the Californians, and they celebrate it with particular mirth and rejoicings. "The three pitahaya months," says Salva Tierra, "resemble the carnival in some parts of Europe, when the men are, in a great measure, stupefied or mad. At this time the whole nation give themselves up to feastings, dancings, and buffooneries; in which whole nights are frequently spent. The actors are chosen for their talents of imitation, and, for the most part, acquit themselves tolerably well.

Digitized by Google

As practice naturally produces perfection, their excellence in dancing is not to be wondered at, it being their principal occupation in time of peace. They dance at their weddings; on any good success in hunting or fishing; at the birth of a child; at a plentiful harvest; at a victory over their enemies; and on every other occasion to which they annex any idea of importance. To these festivities the ranchieras usually invite one another, and likewise send challenges for wrestling, leaping, running, and other trials of strength and agility; to which whole weeks and months are sometimes devoted.

The chief characteristics of the Californians are want of reflection, inconstancy, abhorrence of labour, an inordinate love of pleasure; and in short, a total want of every thing which renders man inventive, tractable, and useful to himself and society. It is in vain to represent to them any future advantages which will result from their making such and such exertions; the relation of means and ends being beyond the reach of their faculties; nor have they the least idea of pursuing such intentions as will procure some future good, or avert impending evil. Their will is proportionate to their faculties; and all their passions move in a very confined sphere. Equally free from avarice and ambition they seem to have no care beyond that of procuring food for the present day, and enjoying their most favourite amusements.

The hatred and revenge of these people are excited by the slightest causes; but they are easily appeased, and even without any satisfaction, if they meet with opposition; for although they appear extremely proud of their courage, it may be said with truth, that they have not the least notion

Digitized by Google

of true bravery. The most trivial circumstance is sometimes sufficient to daunt them, and when once they begin to yield, their fear induces them to stoop to the basest indignities. But if they happen to gain an advantage, or their enemies become disheartened, they behave in the most haughty and overbearing manner. It is but justice however, to observe, that the Californians have few of those bad dispositions for which many of the other American Indians are infamous. No strong liquors are used among them; and it is only on their public festivals that they intoxicate themselves with the smoke of wild tobacco; quarrels are rarely known among them, their malice and rage being reserved for their enemies; and so far are they from harshness or cruelty, that nothing can exceed their gentleness and peaceable disposition.

All authors agree that hitherto no idolatry has been found among the Californians; for when the missionaries first went among them, they neither worshipped creatures nor images, nor did their external performances show the least knowledge of God; yet it is mentioned as a remarkable fact, that they had not only some idea of the nature of God, but also some faint glimmerings of the Trinity, the eternal existence of Christ, and other articles of the Christian religion, though mixed with a great number of absurdities; so that some writers have been induced to suppose that they originally descended from some nation which had received the truths of the Gospel.

They affirm, that there resides in Heaven a powerful being, called *Niparaya*, who created the earth and the sea, who supplies all creatures with food, and can do whatever he pleases, but is never seen, because he has not a body like man. This

Digitized by Google

Niparaya has a wife called *Anayicoyondi*, who, like himself, has no body; and he has likewise three sons, one of whom, named *Quaayayp* has been with the southern Indians and instructed them. He was very powerful, and had a great number of men; for he went into the earth, and brought people from thence. At length, the Indians, through hatred, killed him, and at the same time put a wreath of thorns about his head; but though he is dead, he still remains very beautiful and without any corruption, and although, as being dead, he does not speak, he has a bird that speaks for him.—They likewise assert, that in Heaven there are many more inhabitants than on earth, and that formerly there were great wars in that place: A person of eminent power called *Wac Tuparan* rose up against the Supreme Lord Niparaya, and being joined by numerous adherents, dared to stand an engagement with him; but Niparaya immediately stripped the rebellious chief of all his power, hurled him and his followers into a vast cave under the earth; and created the whales in the sea, to be as guards, that the offenders might never quit the place of their confinement.—They add, that Niparaya does not like that people should fight, and that those who die by a spear or an arrow do not go to Heaven: but, on the contrary, Wac Tuparan wishes that all people were continually fighting, because all who are killed in battle go to his cave.

The tenets of the Loretto nation are as follow: They say, that in the north part of Heaven resides *Gumongo*, "the lord of spirits," who in former ages sent down another spirit named *Guyiaguai*, to visit the earth: that he was no

Digitized by Google

sooner come than he began to sow the land with pitahayas, and likewise made the creeks along the coast of the gulf, till he came to a vast stone in a spacious creek near Loretto. Here he resided for some time, the inferior spirits, his attendants, supplying him with pitahayas, fish, and other provisions, whilst he was employed in making vestments for his priests. After some time, Guyiaguai continued his visitation, sowing pitahayas, and making creeks along all the coast of the Loretto nation; and as a memorial, he left a painted table, which the priests make use of at their entertainments.—They add, that the sun, moon, and the morning and evening stars, are men and women; that every night they fall into the western ocean, whence they swim out by the way of the east; that the other stars are lights made in Heaven by Guyiaguai and his attendants; and that when they become quenched by the sea water, he goes toward the sun to light them again.

The nation of the Cochines believe that there is in Heaven a Supreme Being, who signifies "He who lives," and that he had a son, whose name implied perfection. Besides him, they say, there is another to whom they also give the appellation of Lord; yet when asked how many Lords there are, they answer "One, who made the earth, the trees, and all living creatures." They have likewise some notion of devils; for they say that "He who lives" created certain beings which revolted against him, and are enemies both to him and mankind; wherefore they are called liars and ensnarers. They add, that when men die, these evil spirits come and bury them, that they may not see the Supreme Lord.——From these notions,

Digitized by Google

which, however mingled with absurdities, have an evident connection with many of the truths of the Gospel, it is highly probable that some storm or other accident formerly carried to the coast of California some Europeans, of whom no memory now exists; that these people endeavoured to instil into the Indians the leading doctrines of Christianity; and that their instructions became more and more blended with error till the subjugation of the country by the Spaniards.

The Californian priests are frequently called *hechiceros* or sorcerers, and their supposed commerce with invisible spirits, together with a variety of mystic rites and ceremonies, serves to procure them great authority over their ignorant countrymen. This authority appears most conspicuous at the public feasts; for although the whole consists of eating, drinking, dancing, talking and laughing, yet the presence of the priests makes them considered as religious solemnities. The habit worn by the priests on these occasions consists of a large cloak, covering them from head to foot, and entirely composed of human hair: the head is adorned with a plume of hawk's feathers, and in their hands they carry a fan of the same materials.—The Southern Edues, when they cannot procure feathers, adorn their heads with the tails of deer; and the Cochimes of the north add two strings of the hoofs of the same beast; one as a chain round the neck, and the other as a girdle.

Having intoxicated themselves with the smoke of wild tobacco, these priests open the entertainment with an oration on their tenets, which they deliver with wild gestures and frightful vociferа-

Digitized by Google

tions, pretending to be inspired by certain spirits, and in their name denouncing whatever their frenzy or interest suggests. But whilst these frantic creatures are haranguing, the other continue feasting and dancing, till they abandon themselves indiscriminately to the gratification of their passions, alike regardless of modesty and decorum.

At these feasts, the priests do not omit exercising that authority which they owe to the fears or ignorance of the people, celebrating some as brave and generous; upbraiding others with cowardice and wickedness, and even commanding them to expiate their faults by rigid abstinence, or by clearing the ways along the highest mountains, for the more easy descent of the visiting spirit when it comes to see them.

These priests are the only physicians among the Californians; and their medicines are always administered with great ostentation and solemnity. When all their prescriptions prove ineffectual, they assemble all the patient's relations, and if he have a daughter or sister, they cut off the little finger of her right hand, pretending that the consequent effusion of blood will either relieve the pains of the dying man or remove from the family all sorrow for his death. Then are introduced all the inhabitants of the rancheria, who, being acquainted with their neighbour's desperate condition, set up a confused howling, occasionally covering their faces; whilst the women increase the horror of the scene by their passionate cries and exclamations.

The howling being ended, the patient requests his visitors to suck and blow him, in the same manner as the physician had previously done,

Digitized by Google

This is by filling a stone tube with tobacco, applying one end of it to the part affected, and then, with their mouth at the other end, sometimes sucking up the smoke, at others blowing it through the tube with all their force. This office is performed by every person present, as this and the strength of their cries are accounted the strongest proofs of affection. The doctors then thrust their hands into the sick man's mouth, pretending to pluck death forcibly out of his body; and the women give him several smart strokes, in order to rouse him; till at length the poor wretch breathes his last, and is taken out to be burnt or buried as is most convenient. The funeral is performed without any preparation, and with little ceremony, except that of burning or burying with the deceased all his utensils; and so little do they enquire into the reality of a man's death previously to the burning or interment, that the missionaries have sometimes discovered a person on the funeral pile with evident remains of life, and have snatched them from impending destruction.

The government of the Californians cannot be supposed to exceed the narrow limits of their capacity, there being among them neither divisions of lands nor complaints of illegal intrusions. Every nation consists of several ranchieras, more or less in number according to the fertility of the soil, and each ranchiera consists of several families, united by the ties of consanguinity; but when the missionaries first came among them, neither the ranchieras nor the nations appeared to have any regular chief, to whom they paid tribute or obedience. We have already observed that the priests possessed considerable authority, but this was only seen

Digitized by Google

at their festivals, or during the time of sickness or other incidents, which excited the fear or superstitious veneration of the populace. All the families in a ranchiera seemed to govern themselves according to their own fancy; and even the natural obedience from children to their parents was very little, after the former were able to provide for themselves. In some of the ranchieras, however, the missionaries found one or two persons who gave orders for gathering the products of the earth, directed the fisheries, and headed the military expeditions, in case of a quarrel with any other nation. This dignity was not obtained by descent, seniority, nor election; but the necessity of applying for instruction to one or more, on some common exigency, rendered it natural that he who was the most valiant, expert, or eloquent, should be promoted to the command; yet his authority was limited to certain terms, imposed by the fancy of those who quietly submitted to him. This leader conducted his people to the forests and sea-coasts in quest of food; sent and received messages to and from the neighbouring ranchieras; spirited them up to the revenge of injuries, whether real or feigned, received from other nations; and headed them in all their ravages and depredations. But in all other particulars, every man was entire master of his own liberty.

After this ample description of the customs, manners, religion and government of the Indians of North America, it seems proper to take some notice of the civilized inhabitants of the United States, who now bid fair to attain a very considerable rank among the nations of the earth, both with respect to their numbers, opulence, and literary attainments.—The inhabitants of New

Digitized by Google

England are, for the most part, of English descent; and it is owing to this circumstance and to the general attention paid to education, that the English language has been preserved among them in great purity. Some travellers, indeed, have observed that a New Englander may be easily known by the flat drawling manner in which he pronounces certain words; but this observation seems to apply principally to the peasantry; and, in that sense, the same may be said of a Pennsylvanian, a Virginian, or a Carolinian, for all have some phrases and modes of pronunciation peculiar to themselves. But, as Dr. Morse justly observes, "Men of eminence in the several learned professions ought to be considered as forming the standard of pronunciation for their respective states; and not that class of people who have imbibed the habit of using a number of ridiculous phrases, and who likewise pronounce badly."

The New Englanders are, in general, tall, stout, and well proportioned. Their education, laws, and situation, serve to inspire them with high notions of liberty; and they glory in professing that spirit of freedom which induced their ancestors to brave the dangers of the ocean and the hardships of settling a wilderness. A law respecting the descent of estates which are generally held in fee simple, is the chief foundation and protection of their liberty. By this law, the possessions of a father are equally divided among all his children, excepting the eldest son, who has a double portion; and thus a happy mediocrity is preserved among the people, which removes temptations to luxury, and forms them to habits of temperance and sobriety; at the same time that their industry

Digitized by Google

and economy exempt them from the inconveniences of want.

From the general establishment of schools and the extensive circulation of newspapers in this country, there is scarcely an adult to be found who cannot both read and write; and every township is furnished with men capable of conducting the affairs of their town with judgment and discretion. The people from their childhood form habits of canvassing public affairs, and imbibe a thirst after knowledge which leads them to be very inquisitive. "A very considerable part of the people, says Dr. Morse, have either too much or too little learning to make peaceable subjects. They know enough, however, to think they know a great deal, when in fact they know but little. Each man has his independent system of politics; and each assumes a dictatorial office. Hence originates that restless, litigious, complaining spirit which forms a dark shade in the character of New Englandmen."

Previously to the late war, the sabbath was observed in New England with peculiar strictness; no unnecessary travelling, secular business, visiting, nor diversions being allowed on that sacred day; but the people considered it as consecrated to divine worship, and were generally punctual and serious in their attendance upon it. Since the war, greater freedoms have been allowed; but there is still one distinguishing characteristic in the religious character of the New Englanders which we must not omit; and that is the custom of annually celebrating fasts and thanksgivings. In the spring, the several governors appoint a day to be religiously observed in fasting, prayer, and humiliation, throughout their respective states; and in autumn, after harvest, new proclamations

Digitized by Google

are issued, appointing a day of public thanksgiving for the blessings received in the course of the preceding year.—This pious custom originated with the first settlers in New England, and it is hoped will be sacredly preserved to the latest posterity.

The greater part of the people in New England acquire their property by unremitting industry, and are consequently frugal in spending; yet there are few countries where the hapless sons of indigence or the victims of misfortune fare better. The laws compel every town to provide a competent maintenance for their poor, and the necessitous stranger is sure to meet with relief from some of their humane institutions. As the great body of the people are hardy independent freeholders, their manners are plain, simple, and unpolished; but strangers are always received among them with unaffected kindness and artless hospitality; and in short, it may be truly said, that in no part of the world are the people happier, or better furnished with the conveniences of life, than the farmers of this country.

The women of New England have, for the most part, fresh and healthful countenances, mingled with much female softness and delicacy. Many of them are accounted handsome; and those who have had the advantages of a good education, are particularly agreeable in their manners, and sprightly in conversation. They are taught, at an early age, to manage domestic concerns with neatness and economy; and employments at needle work, at the spinning wheel, or in cooking are reckoned honourable by ladies of the first fortune; whilst idleness and inattention to family affairs are universally detested.

Digitized by Google

Dancing is the principal amusement in New England, and of this the young people of both sexes are extremely fond; but the odious practises of gambling, duelling, horse racing, and cock fighting are professedly despised by all who wish to bear irreproachable characters. The athletic diversions of foot-ball, cricket, quoits, foot races, &c. are universally practised in the country. Some divert themselves with fox-hunting, and others with the more profitable sport of fishing and duck hunting; and in the frontier settlements, where deer and other large game abound, the inhabitants find the chace extremely profitable. In the winter season, when the ground is completely covered with snow, sleighing is the general diversion; and at night the young people resort, in large parties, to a place of rendezvous, where they regale themselves with dancing and a social supper. These diversions, however, are frequently carried to excess, and it is to a sudden exposure to extreme cold after the exercise of dancing, that physicians ascribe the consumptions which are so frequent among the young people in New England.

In New York the English language is generally spoken, though somewhat corrupted by the Dutch dialect, which is still used in some counties. But as there are now hardly any Dutch schools in the state, that language, in a few generations, will probably be wholly discontinued; and the increase of English schools has already had a considerable effect on the improvement of the English language.—The manners of the people vary materially, according to their situation. The ancestors of the inhabitants of the southern and middle parts of Long Island were either natives

Digitized by Google

of Great Britain, or the immediate descendants of the first settlers of New England, and their customs and manners are exactly similar to those of their ancestors.—The counties inhabited by the Dutch have adopted the English manners in a certain degree, but still retain many modes which are peculiar to Hollanders. They were the first settlers of this state, and continued to be amicably disposed towards the English colonies east of them, till an unhappy dispute arose concerning the lands on Connecticut river. They are industrious, neat, and economical in the management of their families and their farms; and whatever business they pursue, they generally follow the old track of their forefathers, seldom inventing any new improvements in agriculture, manufactures, or mechanics.—Besides the Dutch and English, already mentioned, there are in this state great numbers of emigrants from Scotland, Ireland and Germany, and some from France. Most of these are settled in the city of New York, where they retain the manners, religion, and language of their respective countries.

The inhabitants of New Jersey are a collection of English, Scotch, Irish, New Englanders, Low Dutch, and Germans; and as national attachment and mutual convenience have generally induced these several kinds of people to settle together in a body, their peculiar national customs and manners are still preserved; particularly among the lower class of people who have little intercourse with any but their own countrymen. There is also a characteristic difference which results from the intercourse of the inhabitants with different states. Thus, the people in West Jersey trade to Philadelphia, and

Digitized by Google

consequently imitate the fashions and imbibe the manners of that city. The inhabitants of East Jersey trade to New York, and regulate their fashions and manners accordingly: so that the difference, with respect to fashions and manners, between East and West Jersey is nearly as great as between New York and Philadelphia.

There are comparatively but few men of learning in New Jersey; and the lower class, in which may be included three fifths of the inhabitants of the whole state, are shamefully negligent of their children's education. There are, however, several men of abilities in the civil offices and in the learned professions; and the major part of the people are industrious, frugal, and hospitable.

The inhabitants of Pennsylvania consist of emigrants from England, Scotland, Ireland and Germany. The quakers and episcopalians are chiefly of English extraction, and compose one third of the inhabitants: they reside principally in the city of Philadelphia, and in the counties of Chester, Bucks, and Montgomery. The Irish are mostly presbyterians, and as their ancestors came from the north of Ireland, which was originally settled from Scotland, they are sometimes called Scotch-Irish, to denote their double descent: they inhabit the frontier counties, and are very numerous.

The Germans compose one quarter, at least, of the inhabitants of Pennsylvania; and they reside in the counties of Philadelphia, Montgomery, Bucks, Lancaster, Dauphin, York, and Northampton. They have usually fourteen or fifteen members in the assembly of the state, and many of them fill civil offices with great respect-

Digitized by Google

ability; yet the lower class are so ignorant and superstitious, that they are frequently seen going to market with a little bag of salt tied to their horses' manes, in order to secure them from the ill effects of witchcraft. Dr. Morse observes, that a proportionate assemblage of the national prejudices, the manners, customs, religions, and political sentiments of all the various inhabitants will form the Pennsylvanian character. "As the leading traits in this character," says he, "we may mention industry, frugality, enterprize, a taste and ability for improvements in mechanics, in manufactures, in commerce, in agriculture, and in the liberal sciences; temperance, plainness and simplicity in dress and manners; pride and humility in their extremes; inoffensiveness and intrigue; in regard to religion, variety and harmony, liberality and its opposites, superstition and bigotry; and in politics an unhappy jargon.—Such appear to be the distinguishing traits in the collective Pennsylvanian character."

Here we shall take the liberty to lay before our readers some remarks of a Philadelphian writer, on the progress of population, agriculture, manners and government, in Pennsylvania, which are too valuable to be omitted in a work of this nature.

"The first settler in the woods," says this gentleman, "is commonly a man who has outlived his credit or fortune in the cultivated parts of the state, and his usual time for migrating is in the month of April. His first object is to build a small cabin of rough logs, for himself and his family. The floor of this cabin is of earth, the roof is of split logs—the light is received trough the door, and, in some instances, through

Digitized by Google

a small window made of oiled paper. A coarser building adjoining this cabin affords a shelter to a cow and a pair of poor horses.

"The labour of erecting these buildings is succeeded by killing the trees on a few acres of ground near the cabin, which is done by cutting a circle round the trees, two or three feet from the ground. The earth is then ploughed up and planted with Indian corn, which generally yields from forty to fifty bushels per acre, and affords a great deal of nourishment in its unripe state, in the form of what is called *roasting ears*.

"For the first year, a settler endures a great deal of distress from hunger, cold, and a variety of accidental causes, but he seldom complains or sinks under them. As he lives in the neighbourhood of Indians, he soon acquires a strong tincture of their manners. His exertions, while they continue, are violent; but they are succeeded by long intervals of rest; and his principal pleasures consist in fishing and hunting. He loves spirituous liquors, and he eats, drinks, and sleeps in dirt and rags in his little cabin. And in his intercourse with the world, he manifests all the arts which characterise the Indians of North America.

"In this situation he passes two or three years; but in proportion as population increases around him, he becomes uneasy and dissatisfied. Formerly his cattle ranged at large, feeding upon wild grass, or the succulent twigs of the woods; but now his neighbours call upon him to confine them within fences, to prevent their trespassing upon their fields of grain. Formerly he fed upon the flesh of wild animals, but these, which flee from the face of man, now cease to afford him an easy subsistence, and he is compelled to raise

Digitized by Google

domestic animals for the support of his family. Above all, he revolts against the operation of laws, and therefore, rather than surrender up a single natural right for the benefit of government, he abandons his little settlement, and seeks a retreat in the woods, where he again submits to all the above-mentioned toils and difficulties.—It has been remarked, that the flight of this class of people is always increased by the preaching of the gospel; and indeed this is not to be wondered at, when we consider how opposite are its precepts to their licentious manner of living.—If the first settler be the owner of the land which he first cultivated, he sells it at a considerable profit to his successor; but if, as is oftener the case, he be a tenant to some opulent landholder, he abandons it in debt; yet the small improvements he leaves behind him, generally make it an object of immediate demand to a *second* species of settler.

"This settler is generally a person of some property, who pays a certain part in cash for his plantation, and the rest in annual instalments, till the whole is paid. The first object of this settler is to build an addition to his cabin. This is done with hewn logs, and, as saw-mills generally follow settlements, his floors are made of boards: his roof, also, is made of clap-boards, which are a sort of coarse shingles, split out of short oaken logs. This house is divided by two floors, on each of which are two rooms; and under the whole is a cellar walled with stone.

"The settler's next object is to clear a little meadow ground, and plant an orchard of two or three hundred apple trees. His stable is likewise enlarged; and in the course of a year or two, he

builds a large log barn, the roof of which is thatched with rye-straw. He also increases the quantity of his arable land; and instead of cultivating Indian corn alone, he raises a quantity of wheat and rye; the latter of which is raised chiefly for the purpose of being distilled into whiskey.

"This species of settler by no means extracts all from the ground which it is able and willing to give. His fields yield but a scanty increase, owing to the earth not being sufficiently ploughed; the hopes of the year are frequently blasted, by his cattle breaking through the half made fences, and destroying his grain; his horses perform but half the labour that might be expected from them, if they were better fed; and his cattle often die in the spring, from the want of provision and the delay of grass.—His house, as well as his farm, bears many marks of a weak tone of mind. His windows are unglazed, or if they have had glass in them, the ruins of it are supplied with old hats, pillows, &c.—It must also be observed, that this settler is seldom a good member of civil or religious society. With a large portion of an hereditary mechanical kind of religion, he neglects to contribute sufficiently towards building a church, or maintaining a regular administration of the ordinances of the gospel: and, with high ideas of liberty, he refuses to bear his proportion of the debt contracted by its establishment in his country:—he delights chiefly in company, drinks spirituous liquors to excess, and spends a day or two in every week, in attending political meetings; and thus he contracts debts, which, in the course of a few years, compel him to sell his plantation to the *third* and last settler.

Digitized by Google

" This species of settler is commonly a man of good character, and sometimes he is the son of an opulent farmer in one of the interior counties. His first object is to convert every spot of ground, over which he is able to draw water, into meadow; and where this cannot be done, he selects the most fertile spots on the farm, and devotes it by manure to that purpose. His next object is to build a large stone barn, which is made very compact, so as to shut out the cold in winter; for the Pennsylvanian farmers find, that their horses and cattle, when kept warm, do not require near as much food, as when exposed to the cold. He also keeps himself warm in winter, by means of stoves, which save a great deal of labour to himself and his horses, in cutting and drawing wood in cold and wet weather. His fences are every where repaired; he increases the number of the articles of his cultivation; about an acre of ground is laid out for a kitchen garden; and a milk house is erected over the spring which supplies him with water.—His sons work by his side all the year, and his wife and daughters forsake the dairy and the spinning wheel to share with him in the toils of harvest.—The last object of his industry is to build a dwelling house; but though this business is sometimes effected in the course of his life, it is oftener bequeathed to his son, or the inheritor of his plantation; and hence it is a common saying among the farmers, " that a son should always begin where his father left off;" that is, he should commence his improvements by building a commodious dwelling house, suited to the improvements and value of the plantation. This dwelling house, which is generally built of stone, is large and con-

Digitized by Google

venient, and sometimes adjoins the house of the second settler, but is frequently placed at a little distance from it.—The horses and cattle of this species of settler bear evident marks of being plentifully fed and carefully kept; his table abounds with a variety of the best provisions; beer, cyder, and wine are the usual drinks of his family; and the greatest part of the clothing of his household is manufactured by his wife and daughters. In proportion as he increases in wealth, he values the protection of laws, and punctually pays his taxes towards the support of government. Schools and churches likewise derive a due support from him; for benevolence and public spirit as to the means of promoting order and happiness in society, are the natural offspring of affluence and independence.

"From a review of the three different species of settlers it appears, that there are certain regular stages, which mark the progress from the savage to the civilized life. The first settler is nearly related to an Indian in his manners. In the second, the Indian manners are more diluted. But it is in the third species of settlers only, that we behold civilization completed, and to these alone can be properly applied the appellation of *farmers*.

"While we record the vices of the first and second settlers, it is but just to mention their virtues likewise. Their mutual wants produce mutual dependence; hence they are kind and friendly towards each other—their solitary situation makes visitors agreeable to them; hence they are always hospitable to strangers—their want of money has made it necessary for them to associate for the purposes of building their houses, cutting their grain, &c. and this they do in turns for each other,

Digitized by Google

without any other pay than the pleasures which usually attend a country frolic. Perhaps, however, what are here called virtues are rather *qualities* arising from necessity, and the peculiar state of society in which these people live. Virtue should, in all cases, be the offspring of principle.

"I do not pretend to say that this mode of settling farms in Pennsylvania, is universal. I have known some instances where the first settler has performed the improvements of the second, and yielded to the third. I have known a few instances likewise, of men of enterprising spirits who have settled in the wilderness, and who, in the course of a single life, have advanced through all the intermediate stages of improvement, and produced all those conveniences which have been ascribed to the third species of settlers. There are instances, also, where the first settlement has been improved by the same family in hereditary succession, till it has reached the third stage of cultivation. There are many spacious stone houses and highly cultivated farms in the counties lying adjacent to the city of Philadelphia, which are possessed by the great grandsons of men who accompanied William Penn across the ocean, and who laid the foundations of the present improvements of their posterity, in such cabins as have been described."

The inhabitants of Maryland, except in the populous towns, reside on their plantations, often several miles distant from each other. To an inhabitant of a more populous state they appear to live very retired and unsocial lives; and the effects of this comparative solitude are very visible in the countenances as well as in the dress and manners of the country people. They have

Digitized by Google

but little of that sprightliness of look and action which is the genuine offspring of social intercourse; nor do they pay that attention to dress, which decency and propriety have rendered necessary among people who are liable to receive company almost every day. Unaccustomed, in a great measure, to these friendly visits, they often suffer a negligence in their dress which borders on slovenliness; whilst the disconsolate wildness of their countenances, and the indolence of their whole behaviour bespeak the sad effects of solitude and slavery. And whilst the negroes perform all sorts of manual labour, their masters are left to saunter away their lives in sloth and ignorance.

It is but justice, however, to remark, that these observations apply only to the people in the country, and particularly to those whose indigence or parsimony prevents their mingling occasionally with the more polished part of mankind. The inhabitants of the populous towns are, in their manners and customs, like the people of other states in similar situations.

"That pride," says Dr. Morse, "which grows on slavery and is habitual to those who, from their infancy, are taught to believe and to feel their superiority, is a visible characteristic of the inhabitants of Maryland. But with this characteristic we must not fail to connect that of hospitality to strangers, which is equally universal and obvious, and is, perhaps, in part the offspring of it."

Of the inhabitants of Virginia the following character has been given by the Rev. Andrew Burnaby, who travelled through that country between thirty and forty years ago.

"The climate and external appearance of the

Digitized by Google

country conspire to render the inhabitants indolent, easy, and good natured; extremely fond of society, and much given to convivial pleasures; in consequence of which, they seldom show any spirit of enterprise, or expose themselves willingly to fatigue. Their authority over their slaves renders them vain and imperious, and entire strangers to that elegance of sentiment, which is so peculiarly characteristic of polished nations. Their ignorance of mankind and of learning exposes them to many errors and prejudices, especially in regard to Indians and Negroes, whom they scarcely consider as of the human species; so that it is almost impossible in cases of violence committed upon those unhappy people by any of the planters, to have the delinquent brought to justice; for either the grand jury refuse to find the bill, or the petit jury bring in their verdict, "not guilty."

"The display of a character thus constituted will naturally be in acts of extravagance, ostentation and a disregard of economy: it is not extraordinary, therefore, that the Virginians outrun their incomes; and that, having involved themselves in difficulties, they are frequently tempted to raise money by bills of exchange, which they know will be returned protested, with ten per cent interest.

"The public or political character of the Virginians corresponds with their private one. They are haughty and jealous of their liberties, impatient of restraint, and can scarcely bear the thought of being controuled by any superior power. There are but few of them that have a turn for business, and even those are by no means adroit at it. In matters of commerce they are ignorant of the necessary principles that must prevail between

Digitized by Google

a colony and the mother country, and think it a hardship not to have an unlimited trade to every part of the world. Upon the whole, however, the same spirit of generosity prevails here which appears in their private character; they never refuse any necessary supplies for the support of government when called upon, and they are a generous and loyal people.

"The women, for the most part, are rather handsome, though not to be compared with our fair country-women in England. They have but few advantages, and consequently are seldom accomplished; which makes them reserved, and unequal to any interesting conversation. They are immoderately fond of dancing, and indeed it is almost the only amusement they partake of: but even in this they discover a great want of taste, and seldom appear with that gracefulness and ease which these movements are so calculated to display.—Towards the close of an evening, when the company are tired with country dances, it is usual to dance jigs; a practice originally borrowed from the Negroes.—These dances are without any method or regularity: A gentleman and lady stand up, and dance about the room, one of them retiring, the other pursuing, then perhaps meeting, in an irregular fantastical manner. After some time, another lady gets up, and then the first lady must sit down, she being, as they term it, cut out. The second lady acts the same part as the first did, till somebody cuts her out:—the gentlemen perform in the same manner. The Virginian ladies, excepting their amusements, and now and then a party of pleasure into the woods, to partake of a barbacue, chiefly spend their time in needle work and in taking care of their families.

Digitized by Google

They seldom read or endeavour to improve their minds; but they are, in general, good housewives; and though they have not quite so much tenderness and sensibility as the English ladies, yet they make as good wives and as good mothers as any in the world."

"A spirit for literary enquiries," says another author, "if not altogether confined to a few, is, among the body of the Virginians, evidently subordinate to a spirit of gaming and barbarous sports. At almost every tavern, or ordinary, on the public road there are billiard tables, backgammon tables, cards, and other implements for various games. To these public houses the gambling gentry in the neighbourhood resort, to *kill time*, which hangs heavily upon their hands; and at this business they are extremely expert, having been accustomed to it from their earliest youth. The passion for cock-fighting, (a diversion not only inhumanly barbarous, but infinitely beneath the dignity of a man of sense, is so predominant, that they even advertise their matches in the public news-papers. This dissipation of manners results from indolence and luxury, which are the fruits of the African slavery."

The inhabitants of North Carolina are, for the most part, planters, and generally reside two or three miles distant from each other on their plantations. They have no ready market for the produce of their country, and but little intercourse with strangers; yet they have a natural fondness for society, which renders them kind and hospitable to travellers. The women are almost entirely destitute of that bloom and vivacity which usually adorn the features of the ladies in the northern states, but they are said to possess a great deal of

Digitized by Google

tenderness, and, except that they suffer their infants to be suckled by black nurses, they are, in general, very good mothers.

In the lower districts, the inhabitants have but few places for public worship, and even these, being destitute of ministers, are suffered to stand neglected; so that the sabbath is generally disregarded, or distinguished only by the convivial meetings of the white inhabitants, and the noisy diversions of the negroes. The sciences appear to be equally disregarded; for political enquiries and philosophical disquisitions are too laborious for the indolent minds of the people at large. "Less attention and respect,' says an American geographer; "are paid to the women here than in those parts of the United States where the inhabitants have made greater progress in the arts of civilized life. Indeed, it is a truth confirmed by observation, that in proportion to the advancement of civilization, in the same proportion will respect for the women be increased; so that the progress of civilization in countries, in states, in towns, and in families, may be marked by the degree of attention which is paid by husbands to their wives, and by the young men to the young women."

Possessed of a fertile country and by no means destitute of genius, the North Carolinians might easily enjoy the blessings of opulence and learning, would they but cultivate their soil and treasure up instruction. But as the chief part of their time is devoted to drinking, idling, and gambling, the improvement of their minds is too generally neglected, and the cultivation of their lands is left entirely to their overseers and negroes.

"The citizens of North Carolina who are not

Digitized by Google

better employed," says Dr. Morse, "spend their time in drinking, gaming at cards or dice, cock-fighting, and horse racing. Many of the interludes are filled up with a boxing match; and these matches frequently become memorable by feats of gouging, which *delicate* and *entertaining* diversion is thus performed. When two boxers are worried with fighting and brusing each other, they come, as it is called, to *close quarters*, and each endeavours to twist his fore fingers in the ear-locks of his antagonist. When these are fast clenched, the thumbs are extended each way to the nose, and the eyes *gently* turned out of their sockets. The victor, for his expertness, receives shouts of applause from the sportive throng, while his poor *eyeless* antagonist is laughed at for his misfortune.

"In a country that pretends to any degree of civilization, one would hardly expect to find a prevailing custom of putting out the eyes of each other; yet this more than barbarous practice is prevalent in both the Carolinas among the lower class of people. Of the origin of this custom we are not informed; but we presume there are few competitors for the honour of having originated it, and equally as few who are *envious* of the pleasure of those who have the *honour* to continue it."

With respect to the inhabitants of South Carolina, there does not seem to be any peculiarity in their manners, except what results from the mischievous influence of slavery, and even in this, they do not differ from the inhabitants of other southern states. Slavery, by exempting great numbers from the necessities of honest labour, introduces luxury, dissipation, and extravagance; and the absolute authority exercised over the slaves, favours a haughty supercilious behaviour, and is

Digitized by Google

utterly inconsistent with the spirit of that religion which teaches us, "To do to others as we would that others should do unto us."

The Carolinians arrive sooner at maturity, both of body and mind, than the natives of colder climates; and they seem to possess a natural vivacity of genius superior to the inhabitants of the north; but they too generally want that enterprize and perseverance, which are indispensably necessary to considerable attainments in the arts and sciences. There are, however, many instances in this state, in which genius has been united with application, and the happy effects of their union have been experienced by the United States at large.

The South Carolinians are, in general, affable in their deportment, and peculiarly kind and attentive to strangers. Many of them spare no pains nor expence in giving the highest polish of education to their children, by enabling them to travel, and by other means unattainable by those who have but moderate fortunes. The ladies have an interesting softness and delicacy in their appearance and manners, and many of them possess the polite and elegant accomplishments.

Theatrical exhibitions have been prohibited in Charleston, and gaming of all sorts is more discountenanced among fashionable people in this than in any of the southern states. Hunting seems to be the most favourite amusement, at which the country gentlemen are extremely expert, and with surprising dexterity pursue their game through the woods. Twice a year, also, a class of sporting gentlemen have their horse-races, and very considerable bets are sometimes laid on these occasions.

Digitized by Google

Dr. Morse observes, that there is no instance, in which the richer class of people in this state trespass more on propriety than in the mode of conducting their funerals. "That a decent respect be paid to the dead," says he, "is the natural dictate of refined humanity; but this is not done by sumptuous and expensive entertainments, splendid decorations, and pompous ceremonies, which a misguided fashion has here introduced and rendered necessary. 'In Charleston and other parts of the state, no persons attend a funeral any more than a wedding, unless they are particularly invited. Wine, punch, and all kinds of liquors, with tea, coffee, cake, &c. are handed round on these solemn occasions; and, in short, one might suppose that the religious proverb of the wise man, "It is better to go to the house of mourning than to the house of feasting," would be unintelligible and wholly inapplicable here, as it would be difficult to distinguish the house of mourning from the house of feasting."

The Jews in Charleston have this remarkable peculiarity in burying their dead. After the funeral dirge is sung, and just before the corpse is deposited in the grave, the coffin is opened, and a small bag of earth placed under the head of the deceased; then some powder, said to be earth brought from Jerusalem, is put upon the eyes of the corpse, in token of their remembrance of the holy land, and of their expectation of returning thither, in God's appointed time.

Of the inhabitants of Georgia it is almost impossible to give a general character; for, having been collected from different parts of the world, as interest, necessity, or inclination led them, their character and manners consequently partake of

Digitized by Google

all the varieties which distinguish the several states and kingdoms from whence they originally came; and, indeed, there is so little uniformity, that it is difficult to trace any governing principles among them. An aversion to labour is too predominant, owing in part to the relaxing heat of the climate, and partly to the want of necessity to excite industry; but almost all the inhabitants are celebrated for their kind and friendly hospitality to strangers.

"The diversions of these people," says a respectable writer, "are various. With some, dancing is a favourite amusement. Others take a fancied pleasure at the gaming table, which, however, frequently terminates in the ruin of their happiness, fortunes, and constitutions. In the upper counties, horse-racing and cock-fighting prevail; two cruel diversions imported from Virginia and the Carolinas, whence those who practise them principally emigrated. But the most rational and general amusement is hunting; for which Georgia is peculiarly well calculated, as the woods abound with deer, racoons, rabbits, wild turkies, &c. at the same time the woods are so thin and free from obstructions, that a person may generally ride half speed in the chace without danger. In this amusement, pleasure and profit are blended. The exercise contributes essentially to health, and fits for activity in business and expertness in war; the game also affords a palatable food, and the skins a profitable article of commerce.

The constitution of the United States provides for the free exercise and enjoyment of religious worship, without discrimination or preference, for all mankind; provided that the liberty of conscience hereby granted shall not be construed to

Digitized by Google

excuse acts of licentiousness, or to justify practises inconsistent with the peace and safety of the country. The Episcopalians, Presbyterians, Baptists Quakers, Methodists, Roman Catholics, &c. being all well known in England, we shall pass them over in silence, and content ourselves with noticing some sectaries of a more curious description.

The *Shakers* are a sect who sprung up in Europe. A part of them went over from England to New York in 1774, and, being joined by others, they settled at Nisqueaunia above Albany, whence they spread their doctrines, and increased to a considerable number; but their interest is now declining. The late Anna Leese, whom they call the *Elect Lady*, was the head of the sect. Her followers asserted that she was the woman alluded to in the twelfth chapter of the Revelations, and that she spoke seventy-two tongues: And although these tongues were unintelligible to the living, she conversed with the dead, who perfectly understood her language. They also alleged, that she was the mother of all the elect; that she travailed for the whole world; that none could receive any blessing but only by and through her, and that in the way of her being possessed of their sins, by their confessing and repenting of them according to her direction. The elect lady used to assert that she was immortal, that the day of judgment had commenced, and that she and her followers were already set to judge the world. But her death having clearly proved the absurdity of her pretensions to immortality as respected her bodily presence, some of her followers have been induced to suspect the veracity of her other doctrines, and others have totally renounced her enthusiastic scheme.

Digitized by Google

The worship of this sect consists principally in dancing, singing, clapping their hands, falling on their knees, and uttering themselves in groans and sighs, in a sound resembling the roaring of water; turning round on their heels with astonishing swiftness, to show, as they say, the power of God. All these gesticulations are performed in the most violent and boisterous manner, and occasions at intervals a shuddering not unlike that of a person in a strong fit of ague. Hence they have received the appellation of *Shakers*.

The *Moravians* style themselves "the United Brethren of the Protestant Episcopal church;" but they are called Moravians because the first settlers in the English dominions were chiefly emigrants from Moravia. These were the genuine descendants of the church of the ancient United Brethren established in Bohemia and Moravia as early as the year 1456. About the middle of the seventeenth century, they left their native country, to avoid persecution, and to enjoy the free exercise of their religion. They were kindly received in Saxony and other Protestant dominions, and were joined by many serious people of other denominations.—They adhere to the Augustan Confession of Faith, which was drawn up by the Protestant divines, at the time of the reformation in Germany, and which, at that time, contained the doctrinal system of all the established Protestant churches. They still retain the discipline of their ancient church, and make use of episcopal ordination, which has been handed down to them, in a direct line of succession, for more than three hundred years.

With respect to their doctrinal tenets, and the practical inferences thence deduced, they seem to be *essentially* right, and such as cannot be ex-

Digitized by Google

cepted against by any candid and liberal person who takes the trouble to investigate them. They profess to live in strict obedience to the ordinances of our Saviour, such as the observation of the sabbath, infant baptism, and the Lord's supper: and in addition to these, they practise the "feet washing, the kiss of love, and the use of the lot;" for which they adduce several plausible reasons.

The Tunkers are so called in derision from the word *tunken*, "to put a morsel in sauce." The English word that conveys the proper meaning of Tunkers is *Sops* or *Dippers*. They are likewise called Tumblers, from the manner in which they perform baptism, which is by putting the person, while kneeling, head first under water, so as to resemble the motion of the body in the act of tumbling. It is necessary to observe that the Germans sound the letters *t* and *b* like *d* and *p*; hence the words Tunkers and Tumblers have sometimes been corruptly written Dunkers and Dumplers.

The first appearing of this sect in America, was in the fall of the year 1719, when about twenty families landed at Philadelphia, and dispersed themselves in various parts of Pennsylvania. They are sometimes called General Baptists, as holding the doctrines of general salvation. They use great plainness of dress and language, and will neither swear, fight, go to law, nor take interest for the money they lend. They commonly wear their beards, and celebrate the Lord's supper, with its ancient attendants of love-feasts, washing of feet, kiss of charity, and right hand of fellowship. They anoint the sick with oil, for their recovery, and use the trine immersion, with laying on of hands and prayer, even while the person baptised is in the

Digitized by Google

water. Their church government and discipline are nearly similar to those of the English baptists, except that every brother is allowed to speak in the congregation, and their best speaker is usually ordained to be their minister. They have also deacons, deaconesses, and exhorters, who are licensed to use their gifts statedly. "On the whole," says Dr. Morse, "notwithstanding their peculiarities, they appear to be well meaning Christians, and have acquired the character of the *Harmless* Tunkers.

The principal settlement of this people is at Ephrata, about sixty miles westward of Philadelphia. It consists of about forty buildings, of which three are places of worship: One is called Sharon, and adjoins the sisters' apartment as a chapel; another, belonging to the brothers' apartment, is called Bethany, and the third, called Zion, is a common church, where all in the settlement meet once a week for public worship. The brethren have adopted the White Friars dress, with some alterations; the sisters that of the nuns; and both, like them, have taken a vow of celibacy, though this vow is often set aside. When any of them enter into wedlock, they quit their cells, and go among the married people, who subsist by cultivating their lands, and by the profits arising from a printing office, a grist mill, an oil mill, a paper mill, &c. The sisters generally earn their living by spinning, weaving, and various sorts of needle work. Their singing, in the celebration of divine worship, is very charming, owing to the general sweetness of their voices, the variety of parts, and their devout manner of performance.

On the fourth of July 1776, the United States

Digitized by Google

of America declared themselves free and independent, and at the same time they published certain articles of confederation and perpetual union between the states. But as these articles, after eleven years experience, were found inadequate to the purposes of a federal government, delegates were chosen in each of the United States to meet and fix upon the necessary amendments. Accordingly, they met in convention at Philadelphia in the summer of 1787, and agreed upon the constitution of which the following is the substance.—

"1. That all legislative powers shall be vested in a congress of the United States, to consist of a senate and house of representatives.—This last shall be composed of members chosen every second year by the people of the several states. No person is eligible under twenty-five years of age, and who has not been seven years a citizen, and when elected, an inhabitant of that state in which he shall be chosen. The number of representatives shall not exceed one for every thirty thousand, but each state shall have at least one representative, and until such enumeration shall be made, the state of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three. The house of representatives shall choose their speaker, and shall have the sole power of impeachment.

"The senate of the United States shall be composed of two senators from each state, chosen by the legislature thereof for six years; and each senator shall have one vote. Immediately after

Digitized by Google

they shall be assembled, in consequence of the first election, they shall be divided as equally as possible into three classes. The seats of senators of the first class shall be vacated at the expiration of the second year; of the second class at the expiration of the fourth year; and of the third at the end of the sixth year, so that one third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the legislature of any state, the executive thereof may make temporary appointments until the next meeting of the legislature, which shall then fill such vacancies. No person shall be a senator who shall not have attained to the age of thirty, and been nine years a citizen of the United States, and when elected, an inhabitant of that state for which he shall be chosen. The vice-president of the United States shall be president of the senate, but shall have no vote, unless they be equally divided. The senate shall choose their other offices, and a president *pro tempore*, in absence of the vice-president.—They shall have the sole power to try all impeachments; and no person shall be convicted without the concurrence of two thirds of the members present.

"The times, places, and manner of holding elections for senators and representatives shall be prescribed in each state by the legislature thereof; but congress may alter such regulations, except as to the places. The congress shall assemble at least once in every year. Each house may punish its members for disorderly behaviour, and, with the concurrence of two thirds, expel a member. Neither house during the session of congress shall, without the consent of the other, adjourn for more

Digitized by Google

than three days, nor to any other place than that in which the two houses shall be sitting.

"The senators and representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the treasury of the United States. They shall in all cases, except treason, felony, and breach of peace, be privileged from arrest during their attendance; and for any speech or debate in either house, they shall not be questioned in any other place. No senator nor representative shall, during the time for which he was elected, be appointed to any civil office; and no person holding any office under the United States shall be a member of either house during his continuance in office.

"All bills for raising revenue shall originate in the house of representatives; and every bill which shall have passed both houses, shall, before it becomes a law, be shown to the president of the United States: if he approve, he shall sign it; but if not, he shall return it, with his objections, to that house in which it originated, who shall enter the objections at large in their journal, and proceed to re-consider it. If after such re-consideration two thirds of that house shall agree to pass the bill, it shall be sent, together with the objections, to the other house, by which it shall likewise be re-considered, and if approved by two thirds of that house, it shall become a law. The votes of both houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered in the journal of each house respectively.—If any bill shall not be returned by the president within ten days after it has been presented to him, it shall pass into a law, as if he had signed it, unless the congress, by their adjournment, prevent

Digitized by Google

its return.—Every order, resolution, or vote, to which the concurrence of the senate and house of representatives, may be necessary, shall be presented to the president of the United States; and before the same shall take effect, shall be approved by him; or being disapproved by him, shall be re-passed by two thirds of the senate and house of representatives.

"Congress shall have power to levy and collect taxes, to pay the debts, and provide for the defence and welfare of the United States: also to borrow money, to regulate commerce, to establish uniform rules of naturalization and bankruptcies; to coin money, fix the standard of weights and measures, and punish counterfeiters; to establish post offices and post roads; and to promote the progress of science and useful arts, by securing, for limited times, to authors and inventors, their exclusive right to their respective writings and discoveries. They shall also have authority to constitute inferior tribunals; to define and punish piracies and offences against the law of nations; to declare war, grant letters of marque and reprisal, and establish rules respecting captures on land and water: to raise and support armies, but no appropriation of money for that use shall be for a longer term than two years; to provide and maintain a navy; to call forth the militia to execute the laws of the union, suppress insurrections, and repel invasions; to provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the states respectively the appointment of officers, and the authority of training the militia according to the discipline prescribed by congress; to exercise exclusive legislation in all cases what-

Digitized by Google

ever, over such district (not exceeding ten miles square) as may, by cession of particular states, and the acceptance of congress, become the seat of government, and to exercise like authority over all places purchased by consent of the legislature of the state in which the same shall be, for the erection of forts, magazines, arsenals, dock-yards, &c. And to make all laws necessary for carrying into execution the foregoing powers, and all other powers vested in the government of the United States.

"The migration or importation of such persons as any of the states now existing shall think proper to admit, shall not be prohibited by congress prior to the year one thousand eight hundred and eight; but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person. The privilege of the writ of habeas corpus shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it. No bill of attainder nor *ex post facto* law shall be passed. No capitation nor other direct tax shall be levied, unless in proportion to the census directed to be taken. No tax or duty shall be laid on articles exported from any state.—No preference shall be given by any regulation of commerce or revenue, to the ports of one state over those of another; nor shall vessels bound to or from one state, be obliged to pay duties in another. No money shall be drawn from the treasury, but in consequence of appropriations made by law; and a regular account of the receipts and expenditures of all public money shall be published from time to time.

"No title of nobility shall be granted by the United States; and no person holding any office of

Digitized by Google

profit or trust under them, shall, without the consent of congress, accept of any present, emolument, office or title, of any kind whatever, from any king, prince, or foreign state. No state shall, without the consent of congress, lay any duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the produce of such duties shall be for the use of the United States; and all such laws shall be subject to the revision of congress. No state shall levy any duty of tonnage, keep troops, or ships of war in time of peace, enter into any agreement with another state, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

"II. The executive power shall be vested in a president of the United States, who shall hold his office four years; and, with the vice-president chosen for the same term, be elected as follows:—Each state shall appoint a number of electors, equal to the number of senators and representatives to which the state may be entitled in congress; but no senator, representative, nor person holding any office under the United States shall be appointed an elector. The electors shall meet in their respective states, and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same state with themselves. They shall then make a list of all the persons voted for, and of the number of votes for each: This list shall be signed, sealed, and transmitted to the president of the senate; who shall, in presence of both houses, open all the certificates, and cause the votes to be counted. The person having the greatest number of votes shall be the president: if there be more than one who have such majority, and have an

Digitized by Google

equal number of votes, the house of representatives shall choose, by ballot, one of them for president; and if no person have a majority, then from the five highest on the list, the said house shall in like manner choose a president. Each state shall have one vote, and a majority of all the states shall be necessary to a choice. After the election of the president, the person having the greatest number of votes of the electors shall be vice-president: but if two or more have equal votes, the senate shall fix their choice by ballot.

"No person except a natural born citizen, or a citizen of the United States at the time of this constitution, shall be eligible to the office of president; nor any person who shall not have attained to the age of thirty-five years, and been fourteen years a resident in the United States. In case of the removal of the president from office, or of his death, resignation, or inability, it shall devolve on the vice-president, and the congress may by law provide for such a case, both of the president and vice-president, declaring what officer shall then act as president, until the disability be removed, or the vacancies properly filled. The president shall, at stated times, receive for his services a compensation, which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the United States. Before he enters on the execution of his office, he shall take the following oath or affirmation: "I do solemnly swear (or affirm) that I will faithfully execute the office of president of the United States, and will, to the best of my ability, preserve, protect, and defend the constitution of the United States."

Digitized by Google

The president shall be commander of the army and navy of the United States, and of the militia of the several states when called into actual service: he may require the opinion in writing of the principal officer in each of the executive departments, upon any subject relating to the duties of their respective offices; and he shall have power to grant reprieves and pardons for offences against the United States, except in cases of impeachment. He shall also have power, with consent of two thirds of the senate, to make treaties, and to nominate consuls, ambassadors, judges of the supreme court, and all other officers of the United States, whose appointments are not herein otherwise provided for, and which shall be established by law. But the congress may vest the appointment of inferior officers in the president alone, in the courts of law, or in the heads of departments. The president shall have power to fill up all vacancies that may happen during the recess of the senate, by granting commissions which shall expire at the end of their next session. He shall give congress information of the state of the union, and recommend to their consideration such measures as he shall judge expedient. He shall also receive ambassadors and other public ministers; and on extraordinary occasions he may convene both houses, or either of them. The president, vice-president, and all civil officers of the United States shall be removed from office, on impeachment for, and conviction of treason, bribery, or other high crimes and misdemeanors.

"III. The judicial power of the United States shall be vested in one supreme court, and in such inferior courts as congress may establish. The judges, both of the supreme and inferior courts,

Digitized by Google

shall hold their offices during good behaviour, and shall, at stated times, receive for their services a compensation, which shall not be diminished during their continuance in office. The judicial power shall extend to all cases, in law and equity, arising under this constitution, the laws of the United States, and treaties made under their authority. The trial of all crimes, except in cases of impeachment, shall be by jury, and such trial shall be held in the state where the crime shall have been committed; but when not committed within any state the trial shall be at such place as congress may direct. Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and assistance. No person shall be convicted of treason, unless on the testimony of two witnesses, or on confession in open court. Congress shall have power to declare the punishment of treason; but no attainder of treason shall work corruption of blood, or forfeiture, except during the life of the person attainted.

"IV. Full credit shall be given in each state to the public acts, records, and judicial proceedings of every other state; and congress may, by general laws, prescribe the manner in which such acts, records, and proceedings shall be proved, and the effect thereof. The citizens of each state shall be entitled to all privileges and immunities of citizens in the several states. A person charged in any state with treason, felony, or any other crime, who shall flee from justice, and be found in another state, shall, on demand of the executive authority of the state from which he fled, be delivered up, to be removed to the state having jurisdiction of the crime. No person held to service in one state,

Digitized by Google

under the laws thereof, escaping into another, shall, in consequence of any law or regulation therein, be discharged from such service or labour, but shall be delivered up on claim of the party to whom such service or labour may be due.

New states may be admitted by congress into this union, but no new state shall be formed or erected within the jurisdiction of any other; nor shall any state be formed by the junction of two or more states, or parts of states, without consent of the legislatures of the states concerned, as well as of the congress. The congress shall have power to dispose of the territory or other property belonging to the United States; and nothing in this constitution shall be so construed as to prejudice any claims of the United States or of any particular state. The United States shall guarantee to every state in this union, a republican form of government, and shall protect each of them against invasion; and on application of the legislature or of the executive against domestic violence.

" V. The congress, whenever two thirds of both houses deem it necessary, shall propose amendments to this constitution; or on application of the legislatures of two thirds of the several states, they shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this constitution, when ratified by the legislatives of three fourths of the several states, or by conventions in three fourths thereof, as the one or the other mode of ratification may be proposed by the congress.

" VI. All debts contracted and engagements entered into before the adoption of this constitution, shall be as valid against the United States, under

Digitized by Google

this constitution as under the confederation. This constitution, and the laws of the United States which shall be made in pursuance thereof, and all treaties which shall be made under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, any thing in the constitution or laws of any state to the contrary notwithstanding. The senators and representatives before mentioned, and the members of the several legislatures, and all executive and judicial officers shall be bound by oath, or affirmation, to support this constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

"VII. The ratification of the conventions of nine states shall be sufficient for the establishment of this constitution, between the states so ratifying the same."

The above constitution was signed by General Washington as president, and the delegates from twelve states, on the 17th of September 1787, and received the approbation of all the states. Some amendments have since been enated, respecting the free exercise of religion, the freedom of the press, the right of the people to assemble and petition for redress of grievances, and to keep and bear arms: also respecting security against unwarrantable seizures or searches, trials, and indictments, quartering of soldiers, excessive bail, and other rights preserved to the people.

Digitized by Google

COMMERCE, INVENTIONS, MANUFACTURES, &c.

THE vast extent of sea coast which spreads before the United States; the number of excellent harbours and seaport towns; the various creeks and bays which indent the coast; and the rivers, lakes, and canals, which peninsulate the whole country; added to its agricultural advantages and improvements, give this part of the world superior advantages for trade. "Our commerce," says Dr. Morse, "including our exports, imports, shipping, factories, manufactures and fisheries, may properly be considered as forming one interest. This has been considered as the great object and the most important interest of the New England states, but erroneously; for, according to the best calculations, the proportion of property and the number of men employed in manufactures, fisheries, trade, and navigation, do not, even in this commercial part of the union, amount to one eighth of the property and people occupied in agriculture. In this estimate, suitable deductions are made from the value and population of the large towns, for the idle and dissipated, for those who live upon their incomes, and for supernumerary domestic servants. But taking the union at large, the disproportion is much greater. The timber, iron, cordage, and many other articles necessary for building ships to fish or trade, nine parts in ten of their cargoes, the subsistence of the manufacturers, and a great part of their raw materials are the produce of our lands.

Digitized by Google

"Since commerce has ever been considered as the handmaid of agriculture, particularly in this country, where the agricultural interest so greatly predominates; and since neither can flourish without the other, policy and interest point out the necessity of such a system of commercial and agricultural regulations as will form and properly preserve a due connection and balance between them."

The consumption of fish, whale-bone, oil and other articles, obtained through the fisheries, in the towns and counties bordering on the coast, has augmented rapidly within a few years; insomuch that in Philadelphia alone, there are annually vended five thousand barrels of salmon, mackarel, and pickled cod-fish; besides dried fish, oil, spermaceti candles, &c. so that a little fleet of sloops and schooners are almost constantly employed in this business. The demand for these articles is proportionably great in other parts of the United States, especially in Boston, and the large commercial towns that lie along the coast north-eastward, which enter largely into the fishing-trade.

The quantities of fur exported from the northern parts of America to Great Britain, have amounted annually to upwards of forty thousand pounds sterling, estimated from the freight during the years 1768, 1769 and 1770. The sales of fur which took place in London in 1782, produced four thousand seven hundred pounds; the next year it was somewhat increased; and, in 1784, it exceeded two hundred and forty-five thousand pounds. All this fur is paid for by British manufactures, and about a fourth part of it is wrought in England, where its value is doubled.

Digitized by Google

The principal trade of New Hampshire, w formerly with the West India sugar islands, to whi they exported all the various kinds of lumber- horses, cattle, sheep, poultry, salted provision pot and pearl ashes, dried fish, &c. and receiv in return rum, sugar, molasses, and cocoa. The ships were commonly sent to the West Ind islands for freight to Europe, or to the Bay Honduras for logwood, and from thence Europe, where they were sold. They also e ported masts, yards, and spars, for the royal nav of Great Britain.

In the year 1787, the exports from Massachu setts exceeded the imports; and it seems high probable, from the rapid increase of agricultur improvments, and the prevailing spirit of indu try and economy, that the balance in favour this state will be annually increased. New En land rum, pot-ash, lumber, fish, and the produc of the fishery, constitute the principal articles export. No less than four thousand seven hu dred and eighty hogsheads of New England ru were distilled and exported from this state the year 1788, besides a considerable home co sumption.

New markets for the products of this state a continually increasing. The Cape of Good Hop the Isle of France, Surat, Batavia, and Canto have recently opened their ports, to receive bee pork, bacon, cheese, butter, ginseng, timber, a several other articles. To Great Britain are se bees-wax, staves, flax-seed, pot and pearl ashe &c. To the West Indies, lumber, beef, por fish and flour. The whale, cod, and mackar fisheries employ a great number of hands, a yield very considerable profits; and it is muc

Digitized by Google

to the honour of this state, that the inhuman traffic called the slave trade is here totally abolished.

The merchants of Rhode Island, previously to the revolution, imported from Great Britain, dry goods; from Holland, money; from Africa, slaves; from the West Indies, coffee, sugar, and molasses; and from the neighbouring colonies, lumber and provisions. With the money which they procured from Holland they paid their English correspondents; their slaves they carried to the West Indies, together with the lumber, and provisions obtained from their neighbours; the rum distilled from molasses was carried to Africa and exchanged for negroes; their sugars found a good market in Holland; and their dry goods from England enabled them to carry on an advantageous traffic with the neighbouring colonies. By this kind of circuitous commerce they subsisted and grew opulent; but the effects of the late war, together with the prohibition of the slave trade, and the destructive influence of paper money, have occasioned a great stagnation of trade in this state. The present exports are flax-seed, lumber, barley, horses, cattle, fish and poultry: the imports consist of European and West India goods, and logwood from the Bay of Honduras.

The trade of Connecticut is principally with the West India islands, and is carried on in vessels from sixty to a hundred and forty tons burden. The exports are horses, mules, oxen, India corn, fish, pork, timber, oak staves, hoops, &c. Horses, live cattle, and lumber, are permitted in the Dutch, French, and Danish ports; but beef and fish are liable to such heavy duties

Digitized by Google

in the French islands, that little profit arises to the merchant who sends them thither. It must also be observed, that the price of molasses and other articles has been so much enhanced by the English purchases for Canada and Nova-Scotia, that the trade of Connecticut with the West India islands is not very profitable. Cotton, cocoa, indigo, and sugar, are not permitted to be carried away by Americans; and the prohibitory laws are administered with such severity, that these articles cannot possiby be smuggled.

Connecticut has a great number of coasting vessels employed in trafficking with the neighbouring states. To New Hampshire, Massachusetts, and Rhode Island, they carry pork, wheat, and rye; and to the Carolinas, beef, butter, cheese, potatoes, hay, cyder, &c. and receive in return rice, indigo, and money. But as New York is nearer, and the state of the markets always well known, much of the produce of Connecticut is carried there. Considerable quantities are also disposed of at Boston and Providence.

The value of the whole exported produce and commodities from this state, before the revolution, was reckoned at two hundred thousand pounds per annum. But as no accurate estimate has been made under the republican form of government, it is impossible to ascertain whether this amount has increased or diminished.

New York has many local advantages greatly superior to any of the other states. It has at all seasons of the year, a short and easy access to the ocean, and commands the trade of a great proportion of the best settled and best cultivated parts of the United States. Indeed it has been supposed,

Digitized by Google

that more wealth has been conveyed down Connecticut river, and through the Sound to New York, than down the Hudson. New York has availed herself of these advantages to their full extent; insomuch that some of her commercial regulations have been considered as oppressive and injurious to the interest of her neighbours. There is also such a secrecy in the commercial policy of this state, that an accurate account of the annual exports and imports has never been made public. The staple commodity of this state is wheat, of which six hundred and seventy-seven thousand bushels were exported in the year 1775, besides two thousand five hundred tons of bread, and upwards of two thousand eight hundred tons of flour.

The trade of New Jersey is principally carried on with and from New York and Philadelphia, though it wants not good ports of its own. Some attempts have been made by the legislature, to secure to the state its own natural advantages, by granting extraordinary privileges to merchants who would settle at the ports of Amboy and Burlington: but the people having long been accustomed to send their produce to the markets of New York and Philadelphia, and consequently having their correspondencies established, they find it difficult to turn their trade from the old channel. Besides, in those large cities, where are so many opulent merchants, and so many wants to be supplied, credit is more easily gained, and a quicker market found for commodities than could be expected in towns less populous and flourishing. These causes, therefore, with others of a similar nature, have hitherto frustrated the attempts of the legislature.

Digitized by Google

New York and Pennsylvania, not contented with the privileges of being factors and carriers for this state, charge it with the same duties they do their own citizens; which unreasonable tax upon the people, together with the loss they sustain in dealing with a depreciated paper currency, occasions the balance of trade to be against the state, in almost every respect. The principal articles exported are, wheat, flour, horses, cattle, lumber, flax-seed, iron, leather, and hams; the latter of which are celebrated as being the best in the world. Copper ore was formerly reckoned among their most valuable exports; but the mines have not been worked since the commencement of the revolution. The imports consist chiefly of dry and West India goods, and teas from the East Indies.

The commerce of Pennsylvania is very considerable, and her exports are too numerous for recapitulation. We shall, therefore, only subjoin the following remarks of a well informed citizen of Philadelphia. "Much of the provisions which were, in the period antecedent to the late war, shipped to foreign markets, is now consumed by the numerous hands employed in manufacturing those articles of raw materials which were formerly shipped to Europe, and returned to us in a manufactured state. Of these may be mentioned iron, leather, barley, tobacco, and furs; which we now manufacture into nails and steel, shoes, boots, and sadlery, porter and beer, snuff, and hats, in such quantities that they are not only sufficient for our own consumption, but form a respectable part of our exports: among these also may be enumerated, beef, pork, butter, cheese, mustard, loaf-sugar, chocolate, soap,

Digitized by Google

starch, hair-powder, household-furniture, paper, and pasteboard.—From Europe we import, among many other articles, wines, brandy, geneva, salt, drugs, fruit and dry goods of every description;—from the West Indies, rum, sugar, coffee, cotton, and salt; and from the East Indies, teas, spices, dry goods, and China-ware; all of which articles are again exported to other parts of the American continent, and the West Indies, to a very considerable amount."

The trade of Maryland is principally carried on from Baltimore, with the neighbouring states, with the West Indies, and with some parts of Europe. To these places they send annually about thirty thousand hogsheads of tobacco, besides flax-seed, wheat, flour, beans, lumber, iron, &c. and receive in return clothing and other dry goods, wines, spirits, sugars, and other West India commodities.

The trade of Virginia, consists chiefly in tobacco, in which, previously to the revolution, more than two hundred sail of ships were constantly employed, which one with another were reckoned to carry at least three hundred hogsheads, in all sixty thousand and upwards. But let us suppose, as some do, the quantity exported to England to have been seventy thousand hogsheads yearly, each containing four hundred weight of tobacco; and that only one half of this quantity was consumed in England; then the duty of these thirty-five thousand hogsheads, at 8l. each, will amount to 280,000l. The other half, which was exported from hence, could not bring above one fifth of that sum into the exchequer; but if we allow no more than 50,000l. for the duty of the thirty-five thousand hogsheads,

Digitized by Google

exported, the whole amount of the customs on th seventy thousand hogsheads must have been 330,000l. and so much this commodity certainly brought into the exchequer in time of peace, bu in time of war our trade was more uncertain. Thi branch of commerce was a very beneficial one to England, for, besides all other advantages, the profit arising from the tobacco exported hence to foreign markets has been computed to increase the general stock of the nation 150,000l. a year And then, as our colonies took vast quantities o English manufactures in return for the tobacco and other commodities they sent us, it was un doubtedly our interest to give them all possible encouragement and protection. Since the revolution, however, this trade has been rapidly declining; and even the culture of tobacco is in many parts superseded by that of wheat.

With respect to the trade of North Carolina, i appears that a great proportion of the produce o the back country, consisting of Indian corn, wheat tobacco, &c. is carried to market in South Carolina and Virginia. The southern interior counties carry their produce to Charleston, and the nor thern to Petersburg in Virginia. The export from the lower parts of the state are tar, pitch, tur pentine, rosin, boards, staves, shingles, furs, tallow bees-wax, &c. Their trade is principally carried on with the West Indies and the northern states From the latter they receive flour, cheese, apples cyder, iron wares, cabinet wares, hats, and dr goods of all sorts imported from Great Britain France, and Holland. From the West Indies they obtain sugar, rum, and coffee.

In South Carolina, the little attention that is paid to manufactures, occasions a vast consumption o

Digitized by Google

foreign imported articles; but the quantities and value of their exports generally leave a balance in favour of the state, except when there are large importations of negroes. The amount of the exports from Charleston, from November 1786 to November 1787, has been estimated at 505,279*l.* 19*s.* 5*d.* sterling. In the most successful seasons there have been as many as a hundred and forty thousand barrels of rice, and one million three hundred thousand pounds of indigo exported in one year. The average price of rice, since the peace, has been from twelve to fourteen shillings per hundred; and of indigo, of the different sorts, three shillings and ninepence.

The principal articles of export from Georgia are rice, tobacco, indigo, sago, naval stores, bees wax, and lumber of various kinds. In return for these are imported, West India goods, teas, wines, various articles of clothing, and dry goods of all descriptions. In the year 1772 the exports from this state amounted to 121,677*l.* sterling; but it is impossible to ascertain what has been their amount in any one year since the peace, owing to the confusion into which things of this nature were thrown by the revolution.

"In reviewing our commercial and agricultural advantages," says Dr. Morse, "those of manufactures must not be overlooked. Though it is confessed that the United States have full employment for all their citizens in the extensive field of agriculture, yet since we have a valuable body of manufacturers already here, and many more will probably emigrate from Europe; and since we have some poor citizens who are unable to make settlements on our waste lands, good policy, no doubt, will encourage these men to improve the great

Digitized by Google

natural powers which this country posseses, for carrying on the manufacturing business.

"These are the people to be employed in managing those factories which can be carried on by water-mills, windmills, fire, horses, and ingeniously contrived machines; which, as they require but few hands, do not divert people from agriculture and are not burdened with any heavy expence of boarding, lodging, clothing, and paying workmen. By wind and water machines we can make pig and bar iron, cannon shot, nail rods, sheet iron, sheet copper, sheet brass, and sheet lead, anchors, meal of all kinds, gunpowder, paper, snuff, linseed oil, &c. and they assist us in finishing scythes, sickles, and woollen cloths. In the European factories they also card, spin, and weave by water. By means of water likewise our bleaching and tanning businesses are carried on.

"Breweries, which we cannot estimate too highly, distilleries, salt and potash works, sugar-houses, potteries, casting and steel furnaces, works for animal and vegetable oils, steam engines, and several other works are, or may be, carried on by means of that powerful and useful element fire, and be attended with the same savings that have been particularized in speaking of water machines.

"Horses grind the tanners bark and potters clay; they also work the brewers and distillers pumps: and by persons of an inventive mind, might be applied as the moving principle of many kinds of mills.

"Machines ingeniously constructed will give us immense assistance. The cotton and silk manufacturers in Europe are possessed of some that are invaluable to them. One instance has been precisely ascertained which employs some hundreds

Digitized by Google

of women and children, and performs the work of *twelve thousand* carders, spinners, and winders. They have been so curiously improved of late years as to weave the most complicated manufactures. We may certainly borrow some of their inventions, and may strike out others of a similar nature; for on the subject of mechanics, America may justly pride herself.

"A very useful * machine has lately been invented and made in Connecticut, for the purpose of cutting and bending wire for card teeth; which will make thirty-six thousand in an hour; and by a small improvement it may be made to cut double that number with equal ease. With this machine, a man, though blind, with a boy to tend the wire, might easily cut a hundred pounds of wire in a day, and with the proposed improvement they might cut two hundred. The inventor of this, has several other useful manufacturing machines partly completed.

"The advantages which nature has given us for these manufactured improvements have not been neglected; but in some states, particularly in Pennyslvania, New Jersey, Connecticut, and

* This machine is put in motion by a manderil twelve inches long and one inch in diameter. Connected with the manderil are six parts of the machine, independent of each other. The first introduces a certain length of wire into the chops of the *corone*; the second shuts the chops and holds fast the wire until it is finished; the third cuts off the wire; the fourth doubles the tooth in proper form; the fifth makes the last bend; and the sixth delivers the finished tooth from the machine. The manderil is moved by a hand wheel, five feet in diameter, turned by a crank. One revolution of the manderil makes one tooth; ten are made in a second, and thirty-six thousand in an hour.

Digitized by Google

Massachusetts, they have been lately much improved. Still our manufactures will admit of being further pushed without interfering with the general interests of commerce or agriculture, provided they are judiciously apportioned to, and encouraged in those states, which from nature, population and their internal resources, are best fitted to pursue them to advantage. In Georgia, Virginia, Maryland, and the Carolinas, where the people are comparatively few, tillage profitable, and provisions dear, manufactures must be carried on at an evident loss; while the advancement of this business in most of the northern states, where provisions are cheap and land dear, will afford the means of subsistence to many good citizens, whose occupations have been rendered unprofitable by the consequences of the revolution.

"Some of our manufactories are made highly subservient to the interest of agriculture. The workers in leather of every kind, in flax and hemp, in iron, wood, stone, and clay, in furs, horn, and many other articles, employ either the spontaneous productions of the earth, or the fruits of cultivation. Malt liquors too, if generally used, and it is a happy circumstance that they are becoming fashionable, linseed oil, starch, and corn spirits, were they not a poison to our morals and constitutions, would require more grain to make them than has been exported in any year since the revolution. And as grapes are the spontaneous production of all the United States, and by culture might be raised in great perfection, we may anticipate the time as not far distant when we shall have it in our power to make wines of such quality and in such quantities, as to preclude all foreign importations. I cannot omit to observe here, the impolicy and im-

Digitized by Google

morality of importing and consuming such amazing quantities of spirituous liquors; which impair the estates, debilitate the bodies, and ruin the morals of thousands of the citizens of America. They kill more people than any one disease, perhaps than all diseases besides. It cannot be then but that they are ruinous to the country.

"It appears from the best calculations that in the course of the years 1785, 1786, and 1787, *twelve millions* of dollars were expended by the United States, in purchasing West India spirituous liquors; and perhaps nearly half that sum for spirits distilled at home. The expenditure of this immense sum, a sum which would almost cancel our whole national debt, so far from benefiting us, has entailed diseases, poverty, debt, and wretchedness on thousands, who might otherwise have been healthy, independent, and happy.

"Experience has proved that spirituous liquors, except for certain medicinal uses, are altogether unnecessary. In the moderate use of wine, which is a generous and cheering liquor, and may be plentifully produced in our own country; of beer which strengthens the arm of the labourer without debauching him; of cider, which is wholesome and palatable; and of molasses and water, which has become a fashionable drink. In the use of these liquors, labourers and other people who have made the experiment, have been found to enjoy more health and better spirits than those who have made only a moderate use of spirituous liquors. The reason for this appears obvious from a careful calculation recently made, which shows that malt liquors, and several of the imported wines are much more nourishing and cheaper, than spirits. In a pint of beer, or in half a pint of malaga or Teneriffe wine,

Digitized by Google

there is more strength than in a quart of rum. The beer and the wine abound with nourishment, whereas the rum has no more nourishment in it than a pound of air. These considerations point out the utility of confining ourselves to the use of our home made liquors, that in this way we might encourage our own manufactures, promote industry, preserve the morals and lives of our citizens, and save our country from the enormous annual expence of four millions of dollars."

Pennsylvania appears to have taken the lead of the United States in manufactural improvements. A society for the encouragement of manufactures and the useful arts, was instituted at Philadelphia in the year 1787, and several well written pamphlets were published at the same time, representing the numerous resources and advantages of the Americans for promoting manufactures, and pointing out the principles upon which they ought to be established. These publications seem to have had considerable influence in cherishing that spirit of industry and attention to home manufactures, which has lately began to prevail in the eastern and middle states.

A cotton manufactory has lately been established in Philadelphia, at which are made jeans, fustians, velvets, velverets, and corduroys, equal in goodness to those imported, and considerably cheaper. There are also upwards of two hundred and fifty stocking looms in different parts of the city and state, each of which makes, on a medium, one pair and a half of stockings every day: these, deducting Sundays, will amount to 117,375 pair per annum, which at seven shillings and sixpence a pair is 44015l. 12s. 6d. These stockings are sold lower

Digitized by Google

in proportion than those imported from Great Britain, and they are even said to be more durable.

An association of the tradesmen and manufacturers of the town of Boston in Massachusetts, has lately been formed, consisting of a representative from each branch. In this body the whole manufacturing interest of the town is combined; and by a circular letter they have strongly recommended the same mode of procedure to their brethren in the several seaports in the union. In this state are manufactured pot and pearl ashes, linseed oil, bar and cast iron, cannon, cordage, woollen and cotton cloth, hosiery, hats, tools and instruments of husbandry, wool cards, clocks, cutlery, musquets, cabinet work, &c. The town of Lynn is particularly famous for the manufacture of women's silk and stuff shoes; of which a hundred and seventy thousand pair are annually made, and exported to various parts of the United States.

In Connecticut, the farmers and their families are mostly clothed in decent homespun cloth. Their linens and woollens are manufactured in the family way; and although they are generally of a coarser kind, they are of a stronger texture and more durable than those imported from Europe.

A woollen manufactory has been established in Hartford, with a capital of four thousand dollars, and as the legislature of the state have already encouraged it, it bids fair to grow into importance. At New Haven there is a linen manufactory, which seems tolerably flourishing; and one for cotton is about to be established. In East Hartford are a glass work, a snuff and powder mill, and an iron work and slitting mill. Iron

Digitized by Google

works are established at Salisbury, Norwich, and other parts of the state; and at Stafford is a furnace, at which is made large quantities of hollow ware and other ironmongery sufficient to supply the whole state. Paper is manufactured at Norwich, Hartford, and New Haven; and nails of every size are made in almost every town and village in Connecticut; so that considerable quantities can be exported to the neighbouring states, and at a better rate than they can be had from Europe. Oil-mills of a new and ingenious construction have been erected in several parts of the state.

It appears from experiments made formerly in this state, that a bushel of sun-flower seed yield a gallon of oil, and that an acre of ground planted with the seed at three feet apart, will yield between forty and fifty bushels. This oil is as mild as sweet oil, and is equally agreeable with sallads, and as a medicine. It may likewise be used with advantage in ointments, paints, and varnishes. This oil is pressed from the seed in the same manner that cold drawn linseed oil is obtained from flax seed, and with as little trouble. The seed is easily raised, and grows in land of moderate fertility.

Among many other articles manufactured in New York, are the following:—wheel carriages of all kinds, loaf sugar, beer, saddlery, cabinet-work, cutlery, potters-ware, clocks and watches, all kinds of musical and mathematical instruments, ships, and every thing necessary for their equipment. A glass-work and several iron works have been established in several parts of the country; but they have not hitherto been productive, owing solely to the want of workmen, and

Digitized by Google

the high price of labour; for the internal resources and advantages for these manufactories, such as ore, wood, water, hearth-stone, and proper situations for forges, bloomeries, and all kinds of water-works, are immense. There are several paper-mills in this state, which are worked to considerable advantage.

At Trenton and Newark in New Jersey are several valuable tan-yards, where large quantities of excellent leather are made and exported to the neighbouring markets. Paper mills and nail manufactories are erected, and worked to great advantage in many parts of the state. But the iron manufactories in Gloucester, Burlington, Morris, and other counties, constitute the greatest source of wealth to the inhabitants. The mountains in the county of Morris give rise to a number of streams, necessary and convenient for these works; and at the same time furnish a copious supply of wood and ore of a superior quality. In this county are no less than seven rich iron mines, from which might be taken ore sufficient to supply the United States: and to work it into iron there are two furnaces, two rolling and slitting mills, and about thirty forges, containing from two to four fires each. In the whole state of New Jersey, it is supposed there is annually made twelve hundred tons of bar iron, an equal weight of pigs, and eighty tons of nail rods, exclusive of hollow ware, and various other castings, of which great quantities are manufactured.

In the middle and upper parts of South Carolina, the people are obliged to manufacture their own cotton and woollen cloths, and most of their implements of husbandry; but in the lower country the inhabitants depend almost entirely on

Digitized by Google

their merchants for these articles. Indeed it appears that manufactures and agriculture in this and the two adjoining states are yet in the first stages of improvement.

The manufactures of Georgia may be said to be very inconsiderable, if we except indigo, silk, and sago, and even these, of late years, have been but little attended to. The people in the lower part of the state manufacture none of their own clothing, for themselves or their negroes. For almost every article of wearing apparel as well as for instruments of husbandry, they depend on their merchants, who import them from Great Britain and the northern states. In the upper part of the country, however, the inhabitants manufacture the chief part of their clothing, from cotton and from flax.

Digitized by Google

CHAP. III.

OF THE WEST INDIA ISLANDS.

THE islands which lie about the coast of the vast continent of America are almost innumerable, many of them uninhabited, or in other respects too inconsiderable to deserve particular notice. Those of the greatest importance are that vast number called the Antilles, which lie at the entrance of the gulf of Mexico, extending from the coast of Florida to that of New Andalusia in Terra Firma. Some call them the Caribbees, from the first inhabitants; but this is a denomination that most geographers confine to the Leeward Islands. Cuba, Hispaniola, Porto Rico, and Jamaica, are called the Great Antilles. The most considerable of the Little Antilles are Barbadoes, St. Christopher's, Nevis, Antigua, Montserrat, Anguilla, Barbuda, Tobago, Dominica, St. Lucia, St. Vincent, Granada, and the Granadillos; Guadaloupe, Martinico, Marigalante and Santa Cruz, St. Eustatia, Saba, Curassow, Trinadad and Margarita.

Besides these, there are the islands that lie to the south of the straits of Magellan, which are commonly distinguished by the name of Terra del Fuego, or the Land of Fire; being thus called from the fires and smoke perceived by the first discoverers of them, rising from a volcano in the largest island, the flame of which, though not seen in the day-time, is visible at a vast distance in the night, and sometimes throws up great quantities

Digitized by Google

of stones and ashes. These islands extend along the coast, from east to west above four hundred miles, and were supposed to join the continent till Magellan sailed through the straits that part them from it. They were then thought one continued island, till several navigators found they were divided by narrow channels. To these may be added the Bermudas, and the islands of Cape Breton, St. John, and Newfoundland.

CLIMATE, SOIL, MOUNTAINS, SPRINGS, LAKES, &c.

THE island of Juan Fernandes is of an irregular figure, about fifteen miles long, and six broad; but is remarkable for its beauty. The face of the country, at least of the north part of the island, is extremely singular: the woods that cover most of the steepest hills, being free from bushes and underwood, afford an easy passage through every part of them; and the irregularity of the hills and precipices trace out, by their various combinations, a great number of romantic valleys, most of which have a stream of clear water running through them that falls in cascades from rock to rock, as the bottom of the valley, by the course of the neighbouring hills, is broken into a sudden sharp descent. In these valleys, are some particular spots, where the shade and fragrance of the contiguous woods, the loftiness of the overhanging rocks, and the transparency and frequent falls of the neighbouring streams, exhibit scenes of such elegance and dignity as would with difficulty be rivalled in any other part of the globe; for here the simple pro-

Digitized by Google

ductions of unassisted nature may be said to excel all the fictitious descriptions of the most animated imagination. This island was very propitious to the remains of Commodore Anson's squadron in 1741; after they had been buffeted with tempests and debilitated by an inveterate scurvy. The piece of ground, in which the Commodore pitched his tent, was a small lawn, that lay on a little ascent, at the distance of about half a mile from the sea. In the front of his tent was a large avenue cut through the woods to the sea-side, which, sloping to the water with a gentle descent, opened a prospect of the bay and the ships at anchor. This lawn was screened behind by a tall wood of myrtle, sweeping round it in form of a theatre; the slope on which the wood stood rising with a much sharper ascent than the lawn itself; though not so much but that the hills and precipices within land, towered up considerably above the tops of the trees, and added to the grandeur of the view. There were likewise two streams of crystal water which ran to the right and left of the tent within a hundred yards distance; and were shaded by the trees, which bordered the lawns on either side, and completed the symmetry of the whole.

There are instances of two men living, at different times, alone, on this island for many years; the one a Mosquito Indian, the other Alexander Selkirk a Scotchman, who was, after five years, taken on board an English ship and brought back to Europe. From the history of this recluse, Daniel De Foe wrote his "Adventures of Robinson Crusoe," and robbed Selkirk of both the honour and profits of his manuscripts.

Here we shall take the liberty to make a short digression, in order to present our readers with

Digitized by Google

some account of this extraordinary man.—Alexander Selkirk was born in the county of Fife about the year 1676, and was bred a seaman. He went from England in 1703, in the capacity of sailing master of a small vessel, called the Cinque Ports Galley, Charles Pickering captain; and in September the same year, he sailed from Cork in company with another ship called the St. George, commanded by William Dampier, intending to cruize on the Spaniards in the South Sea. On the coast of Brasil Pickering died, and was succeeded in his command by lieutenant Stradling. They proceeded on their voyage round Cape Horn to the island of Juan Fernandes, whence they were driven by the appearance of two French ships of thirty-six guns each, and left five of Stradling's men there on shore, who were taken off by the French. From hence they sailed to the coast of America, where Dampier and Stradling quarrelled and separated by agreement on the 19th of May 1704. In September following, Stradling came again to the island of Juan Fernandes, where Selkirk and his captain had a difference, which, with the circumstance of the ship's being very leaky, induced him to determine on staying there alone. When his companions were about to depart, his resolution was shaken, and he desired to be taken on board; but the captain positively refused to admit him, and he was consequently obliged to remain, having nothing but his clothes, bedding, a gun, and a small quantity of powder and ball; a hatchet, knife, and kettle; and his books and mathematical and nautical instruments. He kept up his spirits tolerably well till he saw the vessel put off; but then (as he afterwards related) his heart yearned within him,

Digitized by Google

and melted at the thought of parting with his comrades and all human society at once.

"Yet believe me, Arcas,
Such is the rooted love we bear mankind,
All ruffians as they were, I never heard
A sound so dismal as their parting oars."

Thomson's Agamemnon.

Thus left sole monarch of the island, with plenty of the necessaries of life, he found himself in a situation hardly supportable. He had fish, goats flesh, turnips, and other vegetables; yet he grew dejected, languid, and melancholy, to such a degree as to be scarcely able to refrain from putting a period to his existence. Eighteen months passed before he could, by reasoning, reading his bible, and meditation, be thoroughly reconciled to his situation. At length, however, he grew happy, employing himself in decorating his hut, and chasing the goats, which he seldom failed of catching. He also tamed young kids, laming them, to prevent their running away; and he constantly kept a guard of tame cats about him, to defend him from the rats, which were exceedingly troublesome. When his clothes were worn out, he made others of goats skins, but could not succeed in making shoes, with the use of which, however, he was in time enabled to dispense. He computed that he had caught a thousand goats during his abode in the island, of which he had released five hundred after marking them by slitting their horns. He made companions of his tame goats, and cats, often dancing and singing with them. He also frequently read aloud, and performed his devotions at stated hours; yet when he was taken off the

island, his language, from disuse of conversation, was become scarcely intelligible.

In this solitude Selkirk continued nearly five years; during which time only two incidents happened which he thought worth relating, the occurrences of every day being, in his circumstances, nearly similar. The one was, that pursuing a goat eagerly, he caught it just on the edge of a precipice, which was covered with bushes, so that he did not perceive it, and he fell over to the bottom, where he supposed by the alteration of the moon that he had lain three days. When he came to himself, he found the goat lying under him dead, and it was with great difficulty that he could crawl to his habitation, whence he was unable to stir for ten days. The other event was the arrival of a ship which he supposed to be French; and so strong was the love of society in his mind that he was eager to abandon his solitary felicity, and surrender himself to them, although enemies; but upon their landing he found them to be Spaniards, of whom he had too great a dread to trust himself in their hands. They were by this time so near, that it required all his agility to escape, which he effected by climbing into a thick tree, being shot at several times as he ran off.

His enemies having departed, Selkirk returned to his situation, and reconciled himself as much as possible to his solitary life till the 2d of February, 1709, where captains Rogers and Courtney arrived in two privateers from Bristol, and after a fortnight's stay at Juan Fernandes, appointed him master's mate of one of their vessels. In October 1711, he arrived in England, where the public curiosity was so strongly excited concerning him, that he was persuaded to put his papers into the

hands of De Foe to arrange and form them into a regular narrative. From this account of Selkirk, De Foe took the idea of writing the romance of Robinson Crusoe, and basely defrauded the original proprietor of his share of the profits.

Cuba is a large and important island, seven hundred miles long and eighty-seven broad. It commands the entrance of the gulfs of Mexico and Florida, as well as the windward passages; and thus it may be properly called the *Key* of the West Indies. It was discovered in 1429 by Columbus, who gave it the name of *Ferdinando* in honour of King Ferdinand of Spain; but it soon recovered its ancient name of Cuba. By the year 1511, the Spaniards had become complete masters of this island, and, according to their own accounts, they had in that time destroyed several millions of people. The possession of Cuba, however, was far from answering the expectations of the Spanish adventurers, whose avarice could not be gratified with any thing but gold. These men finding that there was gold upon the island, concluded it must come from mines; and therefore tortured the few inhabitants they had left, in order to extort from them a discovery of the places where these mines lay. The miseries endured by the unfortunate natives were such, that they had almost unanimously resolved to put an end to their own lives; but were prevented by one of the Spanish tyrants, who threatened to hang himself along with them, that he might have the pleasure, as he said, of tormenting them in the next world worse than he had done in this; and so much were they afraid of the Spaniards, that this ridiculous threat proved sufficient to divert them from their desperate resolution.

The soil of Cuba, if we except a ridge of moun-

Digitized by Google

tains that runs through the island from east to west, is generally very fruitful, and produces abundance of cotton, tobacco, coffee, sugar, and other articles, which are raised upon the other West India islands. The climate, also, is tolerably healthful.

Hispaniola, or St. Domingo, is a fertile and pleasant island, about sixty miles distant from Porto Rico, sixty-six from Cuba, a hundred and thirty-five from Jamaica, and three thousand five hundred from the land's end of England. It is estimated to be a hundred and sixty leagues in length from east to west, and nearly seventy in breadth from north to south. The climate is hot, but cannot be reckoned insalubrious, as many of the inhabitants attain to longevity. It is sometimes refreshed by breezes and rains; and its salubrity is in a great measure owing to the beautiful variety of hills and valleys, woods and rivers, which every where present themselves. It is, indeed, reckoned by far the finest and most pleasant island of the Antilles, as being the best accommodated to all the purposes of life when duly cultivated. In the plains the heat is nearly uniform, but it varies in proportion to the distance from the mountains. The thermometer is sometimes at 99, but in the mountains it rarely rises above 77. There the nights are cool enough to render a blanket welcome; and there are mountains where even a fire is necessary in some evenings. The contrast of violent heats and heavy rains renders St. Domingo humid; hence the tarnished appearance of almost all metals, however brilliant the polish they may originally have had. This is particularly observable on the sea coast, which is more unhealthy than the interior parts of the island. The southern part is very subject to hurricanes, called here

Digitized by Google

southern gales, because they are not attended with such dreadful consequences as the hurricanes in the windward islands.

The two great chains of mountains which extend from east to west, and their numerous spires, give the island an aspect, at a distance, not so favourable as it deserves. They are, however, the cause of its greatest fertility; as they give rise to innumerable rivers, repel the violence of the winds, vary the temperature of the air, and multiply resources of human industry. They abound with excellent timber, and mines of iron, lead, copper, silver, gold, and even mercury. The mountains of Cibao, Selle, and Hotte, are reckoned six thousand feet above the level of the sea. In the bowels of the first, the cruel Spaniards condemned thousands of the natives to sacrifice their lives in search of gold. The mines are not now worked, although many persons are of opinion that they might be wrought with advantage. For many years, this island belonged partly to the French and partly to the Spaniards; it was afterwards ceded entirely to the French; but is now erected into an independent republic.

Porto Rico, the third of the Great Antilles, is likewise divided by a chain of mountains from east to west, and is tolerably well watered with brooks and rivers. The northern parts are said to contain mines of quicksilver, tin, lead, and some gold and silver; but there are none of the latter wrought at present, nor were there ever any considerable ones in the island, though its rivers have some gold dust mingled with their sand and gravel.

Jamaica, the largest of the Antilles, is about a hundred and seventy miles long and sixty broad; and is situated between 17 and 19 degrees of north

Digitized by Google

latitude and between 76 and 79 of west longitude. This island was discovered by Columbus in his second voyage, and he was so charmed with it, as always to prefer it to the rest of the islands. The prospect of this island from the sea, by its constant verdure and numerous bays is extremely pleasant. The coast, and for some miles within, the land is low; but towards the interior it is hilly. The whole island is divided by a ridge of mountains running east and west, and composed of rocks and very hard clay; through which the rains have worn long and deep cavities called *gullies*. There are also about a hundred rivers that issue from them on both sides; but scarcely any of them are navigable except by canoes, wherein sugars and other goods are carried from the plantations to the sea side, and from thence in sloops and schooners to Port Royal and Kingston. This is occasioned either by their falling too precipitately from the mountains, or the shortness of their course: besides, they often carry with them great stones or pieces of timber, and generally much clay or earth, which fouls the water, and gives it a copperish taste, though it becomes tolerably clear and sweet after standing for a few days in earthen jars. In dry seasons, fresh water is very scarce at a distance from the rivers; and the well-water near the sea is brackish and unwholesome.

There are some springs in this island that are remarkable for their petrifying quality; and near Point Morant there is a hot bath in a wood, whose water has proved very serviceable, both by drinking and bathing, for the cure of the cholic, the common disease of the country. In another place there are several salt springs, which, being united, form what is called the Salt River. Salt is made

Digitized by Google

at Jamaica in ponds, into which the sea water comes, and the water being exhaled by the heat of the sun, the salt is left at the bottom. Nor must we omit mentioning a roaring cascade, and a remarkable lake in this island, the latter of which receives abundance of water from a river without any visible outlet.

The climate, like that of all countries between the tropics, is very warm towards the sea, and in marshy places unhealthy; but in more elevated situations it is cooler, and where people live temperately, it is as healthy as any part of the West Indies. The rains fall heavy for about a fortnight in May or October; and hail and thunder are pretty frequent; but ice and snow, except on the tops of the mountains, are never seen, though at no very great height the air is exceedingly cold. The climate was certainly more temperate before the great earthquake, and the island was supposed to be out of the reach of hurricanes, which it has since felt very severely. The heat, however, is much tempered by land and sea breezes; and the hottest time of the day is about eight o'clock in the morning. At night, the wind blows from the land on all sides, so that no ships can then enter. The soil of this island varies very considerably; some parts are deep, black, and rich, and mixed with a kind of potter's earth; some are shallow and sandy, and others of a middle nature.

Barbadoes, the most easterly of the Caribbee islands, subject to Great Britain, is situated between 12 degrees 56 minutes, and 13 degrees 16 minutes north latitude, and between 59 degrees 50 minutes and 60 degrees 2 minutes west longitude. It is generally supposed to extend twenty-five miles from north to south, and about fifteen from

Digitized by Google

Digitized by Google

Digitized by Google

east to west; but these mensurations are so uncertain, that it will convey a more adequate idea of the island to say, that it contains about a hundred and seven thousand acres.

The climate is very hot, especially for eight months in the year, but the heat is not so excessive as in the same latitude on the continent, which may be said of the American islands in general; and it is observable, that though the inhabitants of Barbadoes perspire very much, they are not so weakened by it as we are by the heat in England in July and August, nor are they so apt to be thirsty. The length of the day is nearly the same all the year round, the sun always rising and setting at six o'clock, or within half an hour before and after it, but the twilights are so short that it soon becomes dark after sun set.

The atmosphere is generally clear and serene, and, from the total absence of frost, snow, and hail, it is never liable to the sudden vicissitudes so common in other climates to the northward and southward of the tropics. The air is, in general, very healthy, which is chiefly owing to its having neither bogs nor marshes of stagnated water, nor large forests, which generate a moist air.

It sometimes happens that large pieces of ground planted with sugar canes and even with plantain and banana trees, have slid down to the valleys from the sides of the hills. This happens in very rainy seasons; for the soil upon those hills being frequently not above eight or nine inches deep, and of an oozy, soapy nature underneath, it easily separates from the next immediate substratum, which consists of a slippery chalk, flat stones, or loose gravel. When the soil slides in large pieces its motion is less violent than when it is confined

Digitized by Google

in narrow chasms in the meeting of two hills, where, the collection of water being considerable and heavy, instead of gliding softly between the two strata, it breaks out in different places at once; and then runs down the precipice a mingled torrent of earth and water. Some parts of the soil are hollowed into caves, capable of containing two or three hundred people, and lined with innumerable petrifactions.

Among the fossils of Barbadoes, the most remarkable is an oily bituminous exudation, of a dirty black colour inclining to green. It is procured by digging a hole or trench near the place where it oozes out of the earth; this gradually fills with water, that has a thick film or cream of this liquid bitumen swimming on the surface, from whence it is skimmed off and preserved in earthen jars or other vessels. It is of so inflammable a nature that it serves to burn in lamps; and may be successfully used both in the cure of cutaneous eruptions, and in paralytic and nervous disorders. In St. George's parish are frequently dug up lumps of a transparent resinous substance, resembling resin, from which it is principally distinguished by the fragrance of its smell; and on comparing it with the gum produced by the birch gum tree, one would suppose it to be of the same species. There is another species of bitumen of a solid substance, called *munjac;* which is dug out of the earth on the sides of several hills, and nearly resembles the bitumen found in the Dead Sea. If, by accident, any of these veins take fire, they continue burning a long time, though in a slow dull manner; for the veins being surrounded with earth, it crumbles, and damps the flame into which it falls.

Digitized by Google

Excepting that of Bridge-town in Carlisle Bay, there is scarcely a harbour in the island, nor a stream that deserves the name of a river; but they have wells of good water in almost every part, without digging very deep, and likewise large ponds and reservoirs for rain-water. For the most part, Barbadoes is a plain level country with some small hills; and its woods have been cut down, to make room for plantations of sugar canes, which now occupy the greatest part of the island.

St. Christopher's is the largest of all the Leeward islands, and is represented by some writers as one of the most delightful spots in the world; its mountains rising gradually above each other, and being beautifully variegated with plantations, houses, and gardens. The Rev. Mr. Smith (historian of Nevis) paid a visit to a friend at St. Christopher's, and took a journey to the top of the great mountain there, an account of which he has communicated to a friend, in one of his letters, and to that letter we are indebted for the following particulars.

From Basse Terre, the chief town of the island, our author set out with his friend for Chianne, and, after riding through many plantations of sugar, and some of cotton, they came to thick woods, where they were agreeably entertained with the soft notes of a vast number of turtle-doves, which, with the murmurs of the sea beating gently against the rocks at half a mile's distance, were enough to lull any one to sleep who was so inclined. To avoid the heat of the sun they travelled along the deep valley, which runs upwards from the sea-side, growing steeper the farther from the coast, and plentifully stocked with wild palm, pimento, cassia fistula, and other fragrant trees. Through the whole length of this valley, which is about two

Digitized by Google

Mount Misery, from an unfortunate man, who attempting to climb the precipice, fell backwards and was killed. It is the highest point of land on St. Christopher's, its height being reckoned a mile and a half perpendicular from the sea; but Mr. Smith thinks it not so high by a quarter of a mile. This vast mountain is situated in the middle of a long chain of lesser and lower ones, that run across the island; but, lofty as it is, our author thinks the Nevis mountain considerably higher.

The whole breadth of one part of the above-mentioned rim is taken up by a large single rock, in the form of a triangular pyramid, equilateral, and almost as smooth as if it had been cut by the chisel of a skilful workman. From angle to angle, at the base, it measures seven or eight yards, is somewhat blunted or rather broken off at the top, and a third part downwards from thence it seems to be cracked quite through sideways. The colour of the rock resembles the red part of oriental granite, and like that it is so extremely hard, that a strong arm can scarcely make a visible impression on it with the point of a sharp cutlass. This triangular pyramid on one side of the cavity, and Mount Misery on the other, each taking up the breadth of the rim, prevent a person's walking more than half way round the circle.

Near this pyramid, by the help of bushes and roots, our author and his companions ventured to slide down forty or fifty yards into the cavity, till they came to some wild bananas, which were ready to quench their thirst with most clear and excellent water that runs out of them upon sticking in a penknife just where the leaves join to the top of the body of the tree, and so form a small hollow, as if on purpose to receive the blessings of

Digitized by Google

Heaven, the rain and the dew, and reserve them for the thirsty traveller. It is observable of these trees, that they are annuals, dying quite to the ground every autumn, and shooting up again from the roots in the spring till they are thicker than a man's thigh; but the wood is so very soft and porous, that one may easily cut it through at a single stroke with a sharp hatchet.

Keeping on in a very steep descent, through this wood of bananas, cabbage-trees, &c. they arrived at the bottom of the cavity, where having crossed a little plain they came to an uneven spot of ground consisting of thirty acres or upwards. Here they found a very large rock, jutting out of the side of the hill; and at the bottom of it were thee or four round holes in the earth as wide as a hat-crown, from whence issued hot steams like smoke out of chimneys, which tinged the edges of the holes with seemingly fair brimstone. The little plain above-mentioned is so sulphureous, that it bears nothing but long deadish grass, or rather weeds, with a few stunted bushes.

At length they came to some boiling springs, vulgarly called the "devil's coppers," each of them about three feet in diameter. The water is of a muddy colour, and rises within twelve inches of the surface of the earth, boiling fiercer than a sugar copper, and sending up strong clouds of steam into the air. No kind of grass will grow within twelve yards of these springs, the soil being wholly sulphureous, and so excessively hot, that the travellers found it warm through very thick shoes which they had bought on purpose for this expedition. A negro in company was much frightened at the sight of these coppers, and could

Digitized by Google

not be dissuaded from believing that jumbu, or the devil had his residence underneath them.

On the south side of the plain before mentioned, there is a pond about forty yards over, not supplied by springs, but by rains which fall very heavily in that warm latitude.—The bottom of this pond consists entirely of clay, which is as beautifully veined as the finest Castile soap, and as delicate as well polished marble.—Near this pond grew a bed of rushes, on which the company sat down and dined; and afterwards returned to Chianne, not a little fatigued with their journey.

Nevis, another of the Caribbee islands, is separated from St. Christopher's by a narrow channel; and is about twenty-one miles north of Montserrat. It makes a very beautiful appearance from the sea, being a large conical mountain, covered with fine trees, of an easy ascent on every side, and richly cultivated. The circumference is about twenty-one miles, with a considerable tract of level ground all around.—The climate in the lower parts is reckoned to be warmer than that of Barbadoes, but it is more temperate toward the summit.

The soil of Nevis, especially in the valleys, is fruitful, but the rising ground is stony, and the plantations are consequently the worse, the higher they ascend towards the summit of the mountain. This mountain has been measured with a quadrant from the bay at Charles-town, and it is said to be exactly a mile and a half perpendicular, though Mr. Smith thinks it is not so high; he allows it, however, to be higher than the mountain called Coal-in Norway, or that called Skiddaw in Cumberland.

On the south-side of St. John's parish, there is a

Digitized by Google

considerable spot of sulphureous ground, at the upper end of a deep rupture in the earth commonly called Sulphur-gut, which is so exceedingly hot as to be presently felt through the shoe-soals; and, some eggs being buried in it about an inch deep, for the space of three or four minutes, were as hard in that time as boiling or roasting could have made them.

At the foot of the declivity adjoining to the south side of Charles-town, there is a little hot river called "the bath," supposed to flow from the above-mentioned sulphureous ground, which is not above three quarters of a mile higher up in the country. This rivulet runs at least half a mile before it loses itself in the sands of the sea; and towards the sea-side there is a particular part of it, where a man may set one foot upon a spring that is excessive cold, and the other upon another spring that is surprisingly hot. All distempered people, both whites and blacks, find great benefit from this hot river; and our author says he knew a negro boy, who was sent from Barbadoes to Nevis for that purpose, cured of the leprosy by drinking and bathing in it three or four times a day, after having been twice salivated in vain. Mr. Smith himself bathed in it once a fortnight, and owns that it contributed not a little to his health and vivacity; and, the last nine months of his stay in Nevis, it was his custom to walk to the river every morning at sun rising, and drink a pint of its water, which operated well, and proved very beneficial.

At another place, a little to the southward of Charles-town, there is a sharp point of land that jets out a considerable way into the sea; on the rocky extremity whereof Mr. Smith stood, whilst

Digitized by Google

a negro slipped down from it into the water, and, taking some sand from the bottom, he gave it into our author's hand, who found it to be very warm, the man at the same time affirming that the spring at the bottom was so excessively hot, that he could scarcely bear to set his foot upon it.—The water of Black-rock pond, about a quarter of a mile from Charles-town, is milk warm, occasioned, no doubt, by a mixture of such hot and cold springs; and yet it yields several sorts of excellent fish, and some of the finest eels in the world.

Antigua, situated sixty miles east of St. Christopher's and forty north of Guadaloupe, is reckoned the largest of all the British leeward islands, containing about seventy thousand acres of ground. It is very subject to hurricanes, and the air is not so wholesome as in the neighbouring islands. The soil is sandy, and in many places overgrown with wood; and as there are no rivers nor wholesome springs, the inhabitants are obliged to preserve the rain water in cisterns. A gentleman who visited the island in a time of great drought, observed that the face of the country looked extremely dismal, and the cisterns were almost entirely empty, so that the inhabitants were obliged to send to Guadaloupe and Montserrat for their fresh water, which was afterwards sold for eighteen pence a pail-full.—In some parts of this island are found large, white, and roundish stones, whose inside is hollow, and the outside overspread, as it were, with one continued mass of crystal, which somewhat resembles wrought diamonds set close together.

Montserrat is a small, but very pleasant island, so called by Columbus from its resemblance to the famous mountain near Barcelona in Spain. It is

Digitized by Google

situated in sixteen degrees, fifty minutes north latitude, and in sixty-one degrees west longitude; having Antigua on the north east, St. Christopher's and Nevis on the north west, and Guadaloupe on the south-south-east. It is about twenty-seven miles in circumference, and is supposed to contain between forty and fifty thousand acres.

This island is very mountainous, but its valleys are well watered and fruitful. The mountains are covered with cedars, cypresses, iron-trees (so called from the hardness of the wood) and variety of shrubs and plants. In short, it is a well-planted island, and pretty much frequented by shipping, but it is so surrounded with rocks, that the riding before it is unsafe, and it has no place that can properly be called a haven.

We find nothing more remarkable relating to Montserrat, than the dreadful hurricane which happened there on the 29th and 30th of June 1733, and blew down three fifths of the houses in the island. On the 29th there were thirty-four windmills going, many of which were entirely destroyed. A large copper, that held two hundred and forty gallons, was carried over a high wall, and beat close together by the fall. An empty sugar-hogshead was lifted off the ground by the wind, and carried thirty or forty yards over a dwelling-house. But, what is most surprising of all, a cattle-mill-house, weighing at least twenty thousand pounds, was carried some distance from its situation, and by the force of the fall was broken into innumerable pieces. Such havock was made among the sugar-canes, that some planters, who had a prospect of making two or three hundred hogsheads the next year, would gladly have compounded for sixty or eighty. In a word, the

Digitized by Google

whole damage, exclusive of the shipping, was reckoned not less than fifty thousand pounds of their currency.

Anguilla, the most northerly of the Caribbee Islands, derives its name from its snake like form, and is about thirty miles in length and nine in breadth. It was first discovered by the English in 1650, when it was filled with alligators and other noxious animals, but finding the soil fertile, they settled a colony on it, and imported live cattle, which have since multiplied exceedingly. But the colony not being settled under any public encouragement it soon became a prey to rapacious invaders; other settlers, however, thought proper to remove thither from the adjacent islands, and by their industry the island is now tolerably cultivated.

Barbuda, situated in eighteen degrees thirty minutes north latitude and in sixty-one degrees fifty minutes west longitude, consists principally of low land, but is fruitful and pretty populous. Most of the inhabitants are employed in agricultural pursuits, always finding a ready market for their corn, &c. in the sugar islands. This island is the property of the Codrington family, who have given large benefactions to have their slaves instructed in the doctrines of the Christian religion.

Tobago, the most easterly of the Caribbee islands lies in eleven degrees ten minutes north latitude, and fifty-nine degrees forty minutes west longitude from London. According to the latest accounts, it is rather more than thirty miles in length, between eight and nine in breadth, and from twenty three to twenty-five leagues in circumference.

The climate, notwithstanding its vicinity to the line, is so tempered by the sea breezes, as to be

Digitized by Google

very supportable even to Europeans, and thus also the advantages of having regular seasons and being exempt from hurricanes. — There are throughout the island many rising grounds, though, except at the north-east extremity, there is no part of it that can be properly called mountainous; and even there the country is far from being rugged or impassable. The soil is as fertile and luxuriant as that of any of the islands; and it is well watered by rivers that fall into the sea on both sides, by many smaller streams, and by fresh springs in almost every part of the island. The sea coast is indented by ten or twelve spacious bays, and there are among these one or two ports capable of receiving large vessels.

Dominica, so named by Columbus, from his having discovered it on a Sunday, is situated about half way betwixt Guadaloupe on the north west, and Martinico on the south east. It is about twenty-nine miles long, and sixteen broad, and contains 186,456 acres of land. It has many high and rugged mountains, interspersed with fertile valleys, and is watered by upwards of thirty rivers, besides a great number of rivulets. Several of the mountains contain unextinguished volcanoes, which often discharge vast quantities of burning sulphur. Here also are several warm springs, said to be efficacious in removing tropical disorders, and some of the waters are hot enough to coagulate an egg. The best *eye-stones* that are known, are found on the shores of this island. They are shaped like a lentil, smooth and sleek, but much smaller and of a grey colour, and they derive their name from the use which is made of them for clearing the eyes of any dirt.

St. Lucia was thus called from its being disco-

Digitized by Google

vated on that day dedicated to the virgin martyr of that name. It is about six leagues south of Martinico, and twenty-one miles to the north-west of Barbadoes. The soil is tolerably good, even at the seaside; and is much better the farther one advances into the country. The whole of it is capable of cultivation, except some high and craggy mountains, which bear evident marks of old volcanoes. In one deep valley, there are still eight or ten ponds, the water of which boils up with great violence, and retains some of its heat at the distance of twelve hundred yards from its reservoirs. The air in the inland parts is unwholesome, but it becomes less noxious as the woods are cleared and the ground laid open. On some parts of the coast the air is rendered very unhealthy, by the waters of some small rivers, which spring from the foot of the mountains, and not having sufficient slope to wash down the sands with which the influx of the ocean stops up their mouths, stagnate, and spread into unwholesome marshes on the neighbouring grounds.

St. Vincent, which received its name from being discovered on the feast of that saint, is situated in thirteen degrees of north latitude and in sixty-one of west longitude; being twenty-four miles long, eighteen broad, and between sixty and seventy in circumference. The climate is very warm, at least in the judgment of Europeans. The country is in general hilly, and in some parts mountainous, but interspersed with a variety of luxuriant plains and pleasant valleys; and the high grounds are, for the most part, of easy ascent. Few islands of its extent are so well watered; for several rivers run down from the mountains, and smaller streams from almost every hill, and there are likewise

Digitized by Google

several fine springs at a little distance from the sea.

The volcanic mountain on this island called *Morne-garou* is too remarkable to be passed over in a work of this nature. It was visited in the year 1784 by Mr. James Anderson, surgeon, who is the *only* person that ever ascended to its summit, and from whose account in the seventy-fifth volume of the Philosophical Transactions, the following particulars are taken.

The mountain in question is situated on the north-west part of the island, and is the highest in it. It is constantly reported to have emitted volcanic eruptions; and the ravines at the bottom seem to corroborate the traditions of the inhabitants in this respect. The structure of it, when viewed at a distance, appears different from that of any other mountain in the island, or that Mr. Anderson had seen in the West Indies. He could perceive it divided into many different ridges, separated by deep chasms, and its summit appeared quite destitute of every vegetable production. Several ravines, that run from the bottom a great way up the mountain, were found quite destitute of water; and pieces of pumice stone, charcoal, and several earths and minerals of a particular quality, found in them, plainly indicated some very great singularity in this mountain. Some very old men also informed our author, that they had heard it related by the captain of a ship, that between this island and St. Lucia, he saw flames and smoke rising from the top of the mountain, and next morning his decks were covered with ashes and small stones.

Mr. Anderson's curiosity was so much excited by these circumstances, that he formed a resolu-

Digitized by Google

tion of going up to the top; but was informed that this was impossible, nor could he find either white man, caribbee, or negro, who would undertake to show him the way. Having examined the basis as well as he could, in order to discover the most proper place for attempting an ascent, he found several dry ravines that seemingly ran a great way up, though he could not be certain that they were not intersected by rocks or precipices lying across. Having examined the mountain with a good glass, he thought he perceived two ridges, by which there was a possibility of getting up; and though they appeared to be covered for a great way with wood, he hoped by a little cutting to open a way through that impediment.

On the 26th of February 1784, our author began his journey, having been furnished by a friend with two stout negroes, and having another boy who waited on himself. They arrived at the foot of the mountain a little before seven in the morning, having each a good cutlass, to cut through the woods, or to defend themselves in case of an attack from the caribbees or runaway negroes. Before they could get at either of the ridges, however, they had a rock to climb upwards of forty feet high. Having scrambled up this with great difficulty, they found themselves in the bottom of a deep and narrow ravine, which having ascended a little way, they arrived at the habitation of M. Gasco, a Frenchman. Our author expresses his surprise, that a young and healthy man, and a good mechanic, should sequestrate himself from the world among woods and precipices, where he was in continual danger of being swept away with his whole habita-

Digitized by Google

tion, by the torrents occasioned by the rain. He found him, however, to be an intelligent man, and was hospitably entertained by him.

"The difficulty," says Mr. Anderson, "in going through woods in the West Indies, where there are no roads, nor paths, is far beyond anything an European can conceive. Besides tall trees and thick underwood, there are hundreds of different climbing plants, twisted together like ropes, and running in all directions to a great extent, and even to the tops of the highest trees. These cannot be broken by pushing on; and many of them are not to be cut without difficulty. Besides these, a species of grass with serrated leaves, cuts and tears the hands and face terribly."

By reason of these obstructions, it was upwards of two hours before Mr. Anderson and his attendants got upon the ridge, and there they found their passage more difficult than before. They were now surrounded by a thick forest, rendered more impracticable by the large piles of trees blown down by the hurricanes, which obliged them in many places to creep on their hands and knees to get below them, while in others it was necessary to climb to a considerable height to get over them; at the same time that, by the trunks being rotten, they often tumbled headlong from a great height, and could not extricate themselves without great difficulty.

The fatigue of cutting their way through the woods soon became intolerable to the negroes; so that about four in the afternoon, it was impossible to persuade them to go any farther. Mr. Anderson, therefore, returned to M. Gasco's, where he spent the night, determining to try

Digitized by Google

another route the next morning. The hospitable Frenchman entertained him in the best manner he could; but though he parted with his own hammock to him, and slept on a board himself, our author found it impossible to close his eyes the whole night, by reason of the cold. "The hut," says he, "was built of large reeds, between each two of which a dog might creep through, and the top was covered with dry grass. It is situated in the bottom of a deep gully, where the sun does not shine till nine in the morning, nor after four in the afternoon. It is also surrounded by thick wood, and during the night the whole of the mountain is covered with thick clouds, from which it frequently rains, and which renders the night air exceedingly cold."

Early next morning, Mr. Anderson set out in company with the negro boy, who continued very faithful to him during the whole of the journey. He now resolved to take his course up the ravine, and proceeded for about a mile and an half without any considerable obstruction. However, it now began to narrow fast; and there were numbers of rocks and precipices to climb over, with many bushes and vines, which could scarcely be got through. At length the ravine terminated at the bottom of a very high precipice. It was impossible to know the extent of this, as the top was covered with thick wood; but from the bottom upward as far as our author could see, was loose sand with ferns and tufts of grass, which as soon as he took hold of them, came up by the roots. Though the ascent was evidently at the risk of his life, Mr. Anderson resolved to attempt it; and therefore, telling the boy to keep at some distance behind, lest he should tumble

and drive him down, he began to ascend, digging holes with his cutlass to put his feet in, and taking hold of the tufts of grass as lightly as possible. Notwithstanding all his care, however, he frequently slipped down a considerable way; but as it was only loose sand, he could easily push his cutlass into it up to the handle, and thus, by taking hold of it, recover himself again. At last he got up to some wild plantains, which continued all the way to the place where the trees began to grow. Here he rested himself for some time, waiting for the boy, who got up with much less difficulty than he had done. On getting up to the top of the precipice, he found himself on a very narrow ridge, covered with wood, and bounded by two ravins, the bottoms of which he could not see, the descent to them appearing to be nearly perpendicular, though all the way covered with thick wood. Proceeding onwards, they found the ridge exceedingly narrow, with a tremendous gulf on each side, into which they were every moment in danger of falling; so that Mr. Anderson was obliged to lie down on his belly with great caution, in order to see through the bushes how the ridge tended.

Here a sulphureous smell, or rather one like gunpowder, began to be perceived; which our author knew must proceed from the top of the mountain, as the wind then blew that way; and as it grew stronger as he advanced, he was in hopes that the summit could not be very far distant. Perceiving a rising before him, he imagined that, by getting upon it, he might have a view of the top of the mountain; but when this was done, he could only see a peak on the north-west side of the mountain, to which,

Digitized by Google

by appearance, he judged himself very little nearer than when at the bottom.

The woods now became extremely difficult, great quantities of fallen trees lying buried among the grass, and these being rotten, our author was frequently buried deep among them when he thought himself walking upon firm ground. About noon he was alarmed with a rustling among the bushes, and something like a human voice behind him; but as he was preparing to defend himself against Caribbees or run-away negroes, he was agreeably surprised with the sight of those who had formerly left him, with three others, sent by Mr. Maloune, with plenty of provisions. After refreshing themselves, they renewed their labours with fresh vigour, and Mr. Anderson thought himself sure of reaching the top before night. In a little time he had a fair view of the ravin on the left, which was of prodigious depth, and ran from near the top of the mountain to the sea. Its bottom seemed to be a rock nearly resembling lava in colour, and it seemed as if there had been vast torrents of sulphureous matter running upon it for some time. He now regretted that he knew not of this ravin before he commenced his excursion, as by passing a headland in a canoe, and getting into it he might have gained the summit without all those difficulties he had encountered.

About four o'clock in the afternoon, he had no prospect of the top of the mountain, but imagined that if he could get into the ravin before night, he might easily reach it next morning. After cutting through wild plantains for a great way, however, he found himself at sun set, on the brink of a precipice, were he fortunately escaped falling, by catching hold of some shrubs. They were

Digitized by Google

now about half way down, but all the rest of the way seemed a perpendicular precipice, which it was impossible to pass; the top of the mountain was yet a great way off, and there was no other resource than to attempt the ridge they had left.

The evening was now so far advanced, that they were obliged to take up their residence where they were; and there was only time to place two or three sticks against the stump of a tree, and slightly to cover them with plantain leaves, for a night's habitation. Their situation was extremely uncomfortable; for it began to rain and blow violently, which prevented them from making a fire, and almost chilled them with cold. At break of day they renewed their work with great alacrity; in a short time they had the satisfaction to perceive the woods become thin; and about eleven o'clock they obtained a full view of the top, about a mile distant. It seemed to be composed of six or seven ridges, very much broken in the sides, as if they had suffered great convulsions, and they were also divided by excessively deep ravins without any water in them. Mr. Anderson directed his course towards a high peak that overlooked a large excavation where the ridges met, and which he supposed to be the crater of the volcano. In his way he found the last wood composed of a most beautiful species of trees; and he then entered into a thick long grass, intermixed with fern, which branched and ran in every direction. Through this they were obliged to cut their way with almost as much difficulty as they had done through the woods, and it seemed to continue very near to the top of the mountain. The fatigue of this work soon reduced

Digitized by Google

them to such a situation, that they were scarcely able to stand; and they were obliged to quench their thirst by chewing some leaves, there being no water to be had in the place. Two of the negroes now returned, and the rest refused to proceed any farther; so that Mr. Anderson himself was obliged to abandon his enterprize for the present, and they all began to descend about half an hour after twelve; at sun-set they arrived at M. Gasco's, and notwithstanding his extreme weariness, our author continued his journey to Mr. Malpune's, which is about a mile distant from the foot of the mountain.

Having refreshed himself till the 4th of March, in order to sustain the fatigues of his journey the better, our traveller set out about four in the morning, in company with a Mr. Fraser, who had resolved to go with him. They met with little difficulty till they came to the place whence they had formerly returned. Here, however, they were obliged for a quarter of a mile to cut their way through the grass and ferns beforementioned; which being done, they met with no further obstruction. When they came within a quarter of a mile of the top, they found the climate suddenly altered, the air being extremely cold, and the whole summit of the mountain barren. On the confines of the barren region, however, our author found some beautiful plants, and he observes, that this is the only place in the West Indies where he ever found moss; but here it grew in such plenty that he frequently sunk in it up to his knees.

About noon they reached the summit, and were instantly surprised with the sight of a most extraordinary cavity. It is situated in the very

Digitized by Google

centre of the mountain, at the place where all the ridges meet. Its diameter is somewhat more than a mile, and its circumference to appearance a perfect circle. Its depth from the surrounding margin is above a quarter of a mile, and it narrows a little, but very regularly, to the bottom. Its sides are very smooth, and for the most part covered with short moss, except towards the south, where there are a number of small holes and fissures. This is the only place where it is possible to go down to the bottom, and here the descent is very dangerous, on account of the numberless small chasms. On the west side is a section of a red rock like granite, cut very smooth, and having the same declivity with the other parts. All the rest of the surrounding sides seem to be composed of sand which has undergone the action of an intense fire. It has a crust quite smooth, and about an inch thick, almost as hard as rock; on breaking through which, nothing appears but loose sand. In the centre stands a burning mountain, about a mile in circumference, and of a conic form, but quite level. Out of the middle of the summit rises a small eminence, eight or ten feet high, and perfectly conical; from the apex of which a column of smoke constantly issues. It is composed of large masses of red granite-like rock of various shapes and sizes, which appear to have been split into their present forms by some terrible convulsion of nature.

Great quantities of smoke issue from most parts of the mountain, especially on the north side, which appears to be burning from top to bottom; and the heat is so intense, that it is impossible to ascend it. It is even dangerous to go round the base, as large masses of rock are constantly split-

Digitized by Google

ting with the heat, and tumbling down. At the bottom, on the north side, is a very large rock split asunder: each of the halves which are rent in all directions, are separated to a considerable distance from each other, and the crevices have glossy efflorescences tasting like vitriol. There are also some beautiful crystallizations of sulphur; and on all parts of the mountain are great quantities of sulphur, alum, vitriol, &c.

From the external appearance of this mountain, Mr. Anderson conjectures, that it had but lately began to burn; as on several parts of it, he saw small shrubs and grass which seemed to have been but recently scorched and burnt: there were also several holes on the south, from which smoke issued, that appeared to have broken out but lately, the adjacent bushes being but lately burnt.

On two opposite sides of the burning mountain are two lakes of water, about a stone's throw in breadth: they appear to be deep in the middle, and have a bottom of a kind of clay. The water is a chalybeate, and has a pleasant taste. These lakes probably derive their existence in a great measure, if not totally, from the rain water running down the sides of the crater. On the north side, our author observed the traces of great torrents, which to appearance had conveyed vast quantities of water to these lakes; and by the stones at the bottom he could perceive that absorption or evaporation, or both, went on very fast. The greater part of the bottom of the crater was remarkably level; and on the south side were some shrubs and small trees. Some pieces of pumice stone were met with; and many stones, about the size of a man's fist, rough and blue

Digitized by Google

upon one side, were scattered all over the mountain.

The motion of the clouds on the top of this mountain was very singular. Though there were several parts higher than the crater, yet the clouds seemed always to be attracted by the latter. After entering on its windward side, they sunk a considerable way into it; then mounting the opposite side, and whirling round toward the north-west, they ran along a ridge which tended nearly north-east, and afterwards sunk into a deep ravin, dividing this ridge from another on the north-west corner of the mountain, and the highest on it, lying in a direction nearly north and south. The clouds kept in this ridge to the south end, and then whirled off in their natural direction.

From the situation of these islands to each other, and to the continent of South America, Mr. Anderson conjectures that there are submarine communications between the volcanoes in each of them, and from them to those in the high mountains of South America. He observes, that the crater in this island lies nearly in a line with Souffriere in St. Lucia, and Morne Pelee in Martinico; and probably from thence to a place of the same kind in Dominica, and from thence to the other islands; there being something of the kind in each, Barbadoes and Tobago excepted.

Grenada is the last of the Windward Caribbees, and lies about thirty leagues north of New Andalusia on the continent. It is about twenty-eight miles long, fifteen broad, and sixty-six in circumference. Several bays and harbours lie around it, some of which might be fortified to great advantage, so that it is very convenient for

Digitized by Google

shipping, not being subject to hurricanes. A lake on a high mountain about the middle of the island supplies it with streams of fresh water. It has also the advantages of a salubrious air and a remarkably fertile soil.

The Grenadilloes are from nine to twenty-four miles each in circumference, but are said to be all destitute of water, except the island Cariacou, where one spring has been discovered by digging, and is kept carefully locked up by the proprietor.

The Bermudas or Summer Islands are situated in thirty-two degrees twenty minutes north latitude, and in sixty-five degrees west longitude, between two and three hundred leagues distant from the nearest part of the continent of America, or any of the other West India Islands. The whole number of these islands is said to be about four hundred, but very few of them are habitable. The principal is St. George's which is not above sixteen miles long, and three miles broad, and is surrounded with high rocks, that jut out a considerable way into the sea, and form a natural rampart.

It is universally agreed, that the nature of this and the other Bermuda islands has undergone a surprising alteration for the worse since they were first discovered; the air being much more inclement, and the soil more barren than formerly. This is ascribed to the cutting down those fine spreading cedars for which the islands were famous, and which sheltered them effectually from the blasts of the north wind, at the same time that they protected the undergrowth of the delicate herbs and plants. The Summer Islands, however, might still produce some valuable com-

Digitized by Google

modities, were they properly cultivated. The soil is of various colours, some brown, some inclining to white, and some reddish, like potter's clay. Two or three feet below the mould there lies a white hard body which the inhabitants call rock, but which seems rather to be a sort of chalk or pumice stone. The water on these islands, except that which falls from the clouds, is brackish and disagreeable. They have seldom any snow, or even much rain, but when it does fall, it is generally with great violence, and the north or north-east wind renders the air extremely cold. The storms generally come with the new-moon, and if there happen to be a halo or circle about it, it is a sure sign of a tempest, which is generally attended with dreadful thunder and lightning.

Guadaloupe, situated about mid-way between Antigua and Martinico, is forty-five miles long, thirty-eight broad, and nearly two hundred and forty miles in circumference. It is divided into two parts by a small arm of the sea, which is not above six miles long and from thirty to eighty yards broad. This canal, named the "Salt River," is navigable, but only carries vessels of fifty-tons burden. That part of the island which gives its name to the whole is, towards the centre, full of craggy rocks, where the cold is so intense, that nothing will grow upon them but fern, and some useless shrubs covered with moss. On the top of these rocks, *La Souffriere* or the Brimstone Mountain, rises to an immense height, and exhales through various apertures a thick black smoke, intermixed with sparks that are visible by night.

Father Labat visited this mountain, the top of

Digitized by Google

which he found bare of vegetable productions, except the fern and stunted shrubs already mentioned, which he ascribed partly to the cold of so high a situation, and partly to the sulphureous exhalations. He walked round the hill for three hours and a half, among burnt stones and whitish ashes, which in some places were above his ankles, and smelt strongly of brimstone. On the east side of the mountain he saw two chasms, one of which was an oval hole, about a hundred feet in diameter; but he could not venture near enough to fathom the depth of it, because it frequently sent out black clouds of smoke, mingled with sparks of fire. A little below the least of these chasms, there are three little basons of hot water, one of which is dark coloured and smells like iron, or rather like the water in smith's forges; the second is whitish, and has the taste of alum; and the third is blue and seems impregnated with vitriol.

From all the neighbouring hills flow numberless springs, which fertilize the plains below, and moderate the burning heat of the climate by a refreshing stream, so celebrated, that the galleons, which formerly used to touch at the Windward Islands, had orders to renew their provision with this pure and salubrious water.

That part of the island which is commonly called *Grande Terre*, has not been so much favoured by nature; for, though less rugged, it wants springs and rivers; neither is the soil so fertile nor the climate so wholesome.

Martinico, the chief of the French Caribbee Islands, is situated in fourteen degrees thirty minutes north latitude, and in sixty-one degrees west longitude. It is sixteen leagues in length and forty-five in circumference, without reckon-

Digitized by Google

ing the capes, some of which extend two or three leagues into the sea. It is very uneven, and intersected in all parts by a number of hillocks, which are mostly of a conical form. Three mountains rise above these smaller eminences; the highest bears indelible marks of a volcano, and the woods with which it is covered continually attract the clouds, which occasions noxious damps, and contributes to render it horrid and inaccessible; while the two others are in most parts cultivated. From these mountains issue many springs, which commonly flow in gentle streams, but are changed into torrents on the slightest storm. Their qualities are derived from the soil over which they flow; being in some places excellent, and in others so bad, that the inhabitants are obliged to drink the water they have collected during the rainy season.

Marigalante, situated about twelve miles south of Guadaloupe, was discovered by Columbus, in his second American voyage, and called by the name of his ship, *Maria Galanta*, or "Gallant Mary." It is about eighteen miles long, and between nine and twelve broad. Viewed at a distance from on board a ship, it appears like a floating island, because as it is for the most part flat, the trees seem to swim; but a nearer prospect shows it to be intersected by some rising grounds, which give a pleasing variety to the landscape. On its first discovery, it was supposed to want water, but a charming running stream has since been found, on the banks of which are some excellent plantations of sugar. The climate is much the same as in the other Caribbees; and the whole island is very capable of improvement, the soil being almost equally good, and the land rising no

Digitized by Google

where too high. The coast affords many little bays and secure anchorage for shipping.

St. Eustatia, one of the Dutch Caribbees, is little else than a huge mountain, which has, in all probability, been the seat of a volcano. It is cultivated to the very top, which terminates in a large plain surrounded with woods, and having a hollow in the middle, which serves as a large den for wild beasts.—Saba is another steep rock, on the summit of which is a little ground very proper for cultivation.

The island of Trinidad, separated from New Andalusia by a strait about three miles over, is about sixty-two miles in length, and forty-five in breadth, and was discovered by Columbus in the the year 1498. The soil is very fertile and the productions various, but the climate is accounted unhealthy. There is a curious bituminous lake in this island, of which Mr. Anderson has given the following interesting account in the seventy-ninth volume of the Philosophical Transactions.

"A most remarkable production of nature in the island of Trinidad, is a bituminous lake, or plain, known by the name of *Tar Lake;* by the French called *La Bray,* from its resemblance to, and answering the intention of ship pitch. It lies in the leeward side of the island, about half way from the Bocas to the south end, where the mangrove swamps are interrupted by sand-banks and hills; and on a point of land which extends into the sea about two miles, exactly opposite to the high mountains of Paria on the north side of the gulf.

"This cape, or headland, is about fifty feet above the level of the sea, and is the greatest elevation of land on this side of the island. From the sea

Digitized by Google

it appears a mass of black vitrified rocks; but on a close examination, it is found a composition of bituminous scoriæ, vitrified sand, and earth, cemented together: in some parts, beds of cinders only are found. In approaching this cape, there is a strong sulphureous smell, sometimes disagreeable. This smell is prevalent in many parts of the ground, to the distance of eight or ten miles.

"This point of land is about two miles broad, and on the east and west sides, from the distance of about half a mile from the sea, falls with a gentle declivity to it, and is joined to the main land on the south by the the continuation of the mangrove swamps; so that the bituminous plain is on the highest part of it, and only separated from the sea by a margin of wood, which surrounds it, and prevents a distant prospect of it. Its situation is similar to a savannah, and like that, it is not seen till treading upon its verge. Its colour and even surface present at first the aspect of a lake of water; but it is possible it got the appellation of *Lake* when seen in the hot and dry weather, at which time its surface to the depth of an inch is liquid; and then from its cohesive quality it cannot be walked upon.

"It is of a circular form, about three miles in circumference. At my first approach it appeared a plain, as smooth as grass, excepting some small clumps of shrubs and dwarf trees that had taken possession of some spots of it; but when I had proceeded some yards, I found it divided into areolæ of different sizes and shapes: the chasms or divisions anastomosed through every part of it; the surface of the areolæ perfectly smooth and horizontal; the margins undulated; each undulation enlarged to the bottom till they join the opposite. On the surface, the margin or first undulation is

Digitized by Google

distant from the opposite from four to six feet, and the same depth before they coalesce; but where the angles of the areolæ oppose, the chasms or ramifications are wider and deeper. When I was at it, all these chasms were full of water, the whole forming one true horizontal plane, which rendered my investigation of it difficult and tedious, being necessitated to plunge into the water a great depth in passing from one areolæ to another. The most accurate idea that can be formed of its surface will be from the areolæ and their ramifications on the back of a turtle. Its common consistence and appearance is that of pit-coal, the colour rather greyer. It breaks into small fragments of a glossy and cellular appearance, with a number of minute and shining particles interspersed through its substance: it is very friable, and when liquid, is of a jet black colour. Some parts of the surface are covered with a thin and brittle scoria, a little elevated. As to its depth I can form no idea of it; for in no part could I find a substratum of any other substance: in some parts, however, I found calcined earth mixed with it.

"Although I smelt sulphur very strong on passing over many parts of this plain, I could discover no appearance of it, nor any rent or crack through which the steams might issue; probably it was from some part of the adjacent woods; for although sulphur is the basis of this bituminous matter, yet the smells are very different and easily distinguished, for its smell comes the nearest to that of pitch of any thing I know. I could make no impression on its surface without an axe; but at the depth of a foot, I found it a little softer, with an oily appearance in small shells. A little of it held to a burning candle makes a hissing or crackling noise like nitre,

Digitized by Google

emitting small sparks with a vivid flame, which extinguish the moment the candle is removed. A piece put in the fire will boil up a long time without suffering much diminution; and after a long time's severe heat, the surface will burn, and form a thin scoria, under which the rest remains liquid. Heat seems not to render it fluid, nor to occupy a larger space than when cold; from which I imagine there is but little alteration on it during the dry months, as the solar rays cannot exert their force above an inch below the surface. I was told by one person, that in the dry season the whole was an uniform smooth mass; and by another that the ravins contained water fit for use during the year. But neither of these assertions can I believe; for if, according to the first, it were an homogeneous mass, something more than an external cause must affect it to give it the present appearances; nor without some hidden cause can the second be granted. Although the bottoms of these ramified channels admit not of absorption, yet from their open exposure, and the black surface of the circumjacent parts, evaporation must go on amazingly quick, and a short time of dry weather must soon empty them; nor from the situation and structure of the place is there a possibility of supply but from the clouds. To show that the progress of evaporation is inconceivably quick here, at the time I visited it, there were, on an average, two thirds of the time incessant torrents of rain; but from the afternoon being dry with a gentle breeze, (as is generally the case during the rainy season in this island), there evidently was an equilibrium between the rain and the evaporation; for in the course of three days I saw it twice, and perceived no alteration on the

Digitized by Google

height of the water, nor any outlet for it but by evaporation.

"I take this bituminous substance to be the *bitumen asphaltum* of Linneus. A gentle heat renders it ductile: hence, mixed with a little grease or common pitch, it is much used for the bottoms of ships, for which intention it is collected by many; and I should conceive it a preservative against the borer, so destructive to ships in this part of the world.

"Besides this place, where it is found in a solid state, it is found liquid in many parts of the woods, and at the distance of twenty miles from this, about two inches thick, in round holes of three or four inches diameter, and often in cracks or rents. This is consequently liquid, and smells stronger of tar than when indurated, and adheres strongly to any thing it touches: grease is the only thing that will divest the hands of it.

"The soil in general, for some distance round La Bray, consists of cinders and burnt earths; and where not so, it is a strong argillaceous soil; the whole exceedingly fertile, which is always the case where there are any sulphureous particles in it. Every part of the country, to the distance of thirty miles round, has every appearance of being formed by convulsions of nature from subterraneous fires. In several parts of the woods are hot springs; some I tried with a well-graduated thermometer of Fahrenheit were twenty and twenty-two degrees hotter than the atmosphere at the time of trial. From its position to them, this part of the island has certainly experienced the effects of the volcanic eruptions, which have heaped up those prodigious masses of mountains that terminate the province of Paria on the north; and no doubt

Digitized by Google

there has been, and still probably is, a communication between them.—One of these mountains opposite to La Bray in Trinidad has every appearance of a volcanic mountain: however, the volcanic effects have been very weak here, as no traces of them extend above two miles from the sea in this part of the island, and the greater part of it has had its origin from a very different cause to that of volcanoes; but they have certainly laid the foundation of it, as is evident from the high ridge of mountains which surrounds its windward side, to protect it from the depredations of the ocean, and is its only barrier against that overpowering element, and may properly be called the skeleton of the island.

"From every examination I have made, I find the whole island formed of an argillaceous earth, either in its primitive state or under its different metamorphoses. The bases of the mountains are composed of *schistus argillaceous*, and *talcum lithormargo*; but the plains or lowlands remaining nearly in the same moist state as at its formation, the component particles have not experienced the vicissitudes of nature so much as the more elevated parts, consequently retain more of their primitive forms and properties. As argillaceous earth is formed from the sediment of the ocean, from the situation of Trinidad to the continent, its formation is easily accounted for, granting first the formation of the ridge of mountains that bounds its windward side, and the high mountains on the continent that nearly join it: for the great influx of currents into the gulf of Paria from the coasts of Brasil and Andalusia must bring a vast quantity of light earthy particles from the mouth of the numerous large rivers which traverse these parts of the continent;

Digitized by Google

but the currents being repelled by these ridges of mountains, eddies and smooth water will be produced where they meet and oppose, and therefore the earthy particles would subside and form banks of mud, and, by fresh accumulations, would soon form dry land: and from these causes it is evident such a tract of country as Trinidad must be formed. But these causes still exist, and the effect from them is evident; for the island is daily growing on the leeward side, as may be seen from the mud beds that extend a great way into the gulf, and these constantly increase. But from the great influx from the ocean at the south end of the island, and its egress to the Atlantic again, through the Bocas, a channel must ever exist between the continent and Trinidad."

Margarita, or the Pearl Island, is situated in eleven degrees thirty minutes of north latitude, and in sixty four degrees two minutes of west longitude. It was discovered by Columbus and is about thirty five leagues in circumference. The soil is very fertile in maize and fruits, and abounds in pasture and verdant groves; yet is totally destitute of fresh water, which the inhabitants are obliged to bring from the continent. The Spaniards were induced to take possession of it, on account of the valuable pearls found in the oysters abounding on its coast. They built a castle called *Monpadre*, and employed prodigious numbers of negroes in the pearl fishery; cruelly forcing them to tear up the oysters from the rocks to which they stuck, although the coast abounds with sharks, which devoured many of them. In 1620, this island was invaded by the Dutch, who demolished the castle; since which time it has been almost abandoned by the Spaniards. It is now principally inhabited by the natives, to whom particular indulgences

were granted by the court of Spain, on account of their ready submission to Columbus.

Terra del Fuego, separated from the southern extremity of America by the straits of Magellan, consists of a chain of stupendous mountains; but those writers who have represented it as perpetually covered with snow, and destitute of wood, are evidently mistaken, and their error must have arisen from having visited it in winter, for the crew of the Endeavour, commanded by captain Cook, perceived trees when they were at a considerable distance from the island, and on a nearer approach, they found the coast and the sides of the hills clothed with an agreeable verdure. The summits of the hills are barren, but the valleys are rich, and a brook is to be found at the foot of almost every hill. The water has a reddish tinge, but is not ill tasted.

The climate is intensely cold, and in January 1768, (which was the summer season in this part of the world), two persons who went on shore with Sir Joseph Banks, Dr. Solander, and others, perished by sleeping one night on the island. The following account will set this matter in a clearer light, and may probably be acceptable to most of our readers.—"Mr. Banks, Dr. Solander, Mr. Buchan, and several other gentlemen, accompanied by servants, went a considerable way into the country, where they had marshy ground, and very cold blasts of wind and snow to contend with; however, after great fatigue, they at last attained a considerable eminence they had in view; and here they found a great variety of plants, that gratified their curiosity and repaid them for their toil.

"It was now near eight o'clock in the evening,

Digitized by Google

and Dr. Solander, who knew from experience that extreme cold, when joined with fatigue, occasions a drowsiness that is not easily resisted, intreated his friends to keep in motion, however disagreeable it might be to them:—his words were, 'Whoever sits down, will sleep; and whoever sleeps, will wake no more.' Every one seemed accordingly armed with resolution; but on a sudden, the cold became so very intense, as to threaten the most direful effects. It was very remarkable, that Dr. Solander himself who had so forcibly admonished and alarmed his party, should be the first who insisted upon being suffered to repose. In spite of the most earnest intreaties of his friends, he lay down amidst the snow, and it was with great difficulty they kept him awake. One of the black servants also became weary and faint, and was upon the point of following the doctor's example. Mr. Buchan was therefore detached with a party to make a fire at the first commodious spot they could meet with. Mr. Banks, with four more, remained with the doctor and Richmond the black, who, with the utmost difficulty, were induced to come on; but after walking a few miles farther, they expressed their inability of proceeding. When the black was informed, that if he remained there he would soon be frozen to death, he replied, that he was so exhausted with fatigue, that death would be a relief to him. Dr. Solander said he was not unwilling to go, but that he must first take some sleep, notwithstanding what he had previously declared to the company.

"Thus resolved, they both sat down, supported by bushes, and in a short time fell fast asleep. Intelligence now came from the advanced party, that a fire was kindled about a quarter of a mile farther

Digitized by Google

on the way. Mr. Banks then waked the doctor, who had almost lost the use of his limbs already, though it was but a few minutes since he sat down; he nevertheless consented to go on. Every measure taken to relieve the black proved ineffectual he remained motionless, and they were obliged to leave him to the care of the other black servant and a sailor, who appeared to have been the least hurt by the cold; and they were to be relieved as soon as two others were sufficiently warmed to supply their places. The doctor was with much difficulty got to the fire. Those who were sent to relieve the companions of Richmond, returned in about half an hour, without being able to find them. There was a fall of snow which continued for nearly three hours, and there remained no hopes of seeing the absentees again, at least alive. About twelve o'clock, however, a great shouting was heard at a distance, which gave inexpressible satisfaction to every one present. Mr. Banks and four others went forth and met the sailor, who had just strength enough to walk; he was immediately sent to the fire, and they proceeded to seek for the two others. They found Richmond upon his legs, but incapable of moving them; the other black was lying senseless upon the ground. All endeavours to bring them to the fire were fruitless, nor was it possible to kindle one upon the spot, on account of the snow that had fallen, and was still falling; so that there was no alternative, and they were compelled to leave the two unfortunate negroes to their fate, after making them a bed of boughs, and covering them very thick with the same.

"As all hands had been employed in endeavouring to carry the two blacks to the fire, and

Digitized by Google

had therefore been exposed to the cold for near an hour and a half, some of them began to be afflicted in the same manner as those they went to relieve. At length, however, they reached the fire, where they passed the night in a very disagreeable manner. The party that set out from the ship consisted of twelve, of whom two were already judged to be dead: it was doubtful whether a third would be able to return on board; and Mr. Buchan, a fourth, who had just recovered from fits, seemed threatened with them again. They had also wandered so far into the interior of the island, that the ship was a long day's journey distant, and they had not provisions left sufficient to afford the company a single meal.

"Next morning, at day-break, nothing presented itself to view all around but snow, the trees being equally covered with it as the ground, and the blasts of the wind were so violent and frequent, that their journey was rendered impracticable, and there was much reason to dread perishing with cold and famine. However, at about six o'clock, they were flattered with a dawn of hope of being delivered, by discovering the sun through the clouds, which gradually diminished. Previous to their setting out, messengers were dispatched to the unhappy negroes, who returned with the melancholy news of their death.

"About ten o'clock, they set out on their journey to the ship, and in about three hours, to their great astonishment and satisfaction, they found themselves upon the shore, much nearer to the vessel than their most sanguine expectations could have flattered them.—The congratulations every one on board expressed at their return, can better be imagined than described."

Digitized by Google

Newfoundland is a large island belonging to Great Britain, and situated between forty-six and fifty-one degrees of north latitude, and between fifty-three and fifty-eight degrees west longitude from London; it is bounded on the north by the straits of Belleisle, which separate it from Labrador; on the east and south by the Atlantic Ocean; and on the west by the Gulf of St. Lawrence.

Within the circuit of sixty miles of the southern part, the country is hilly, but not mountainous. The hills increase in height as they recede from the sea; and their course is irregular, not forming a continued chain, but rising and falling abruptly. The coasts are high, and the shores remarkably bold. The country is much wooded, and the hills (such, at least, as have not flat summits to admit the rain to stagnate on them), are clothed with birch, hazel, spruce, fir, and pine trees; all of which, however, are small, owing to the inhabitants taking off the bark to cover their fish stages. The island is on all sides, more or less, pierced with deep bays, which peninsulate it in many places, by isthmuses most remarkably narrow.

The mountains on the south-west side, near the sea, are very high, and terminate in lofty headlands. Such are Chapeau Rouge, a most remarkably high promontory. Cape St. Mary's, and Cape le Hune.—On the north-east, most of the hills terminate pyramidally, but form no chain. The interior parts of the country consist chiefly of morasses, dry barren hammocks, or level land, with frequent lakes and ponds, and in some places covered with stunted black spruce. The rivers of Newfoundland are unfit for navigation, but they are of use in floating down the wood with the summer floods. Near the brooks it is that timber

Digitized by Google

is commonly met with, but seldom above three or four miles inland, and in valleys; the hills in the northern district being naked and barren.

Cape Breton is separated from Nova Scotia by a narrow strait called *Canso*, and is about a hundred miles in length and fifty in breadth. It is surrounded by little sharp-pointed rocks, separated from each other by the waves, above which some of their tops are visible. All its harbours are open to the east, turning towards the south. Except in the hilly parts, the surface of the country has but little solidity, being every where covered with a light moss and with water. The dampness of the soil is exhaled in fogs, without rendering the air unwholesome. In other respects, the climate is very cold; owing either to the prodigious quantity of lakes, which cover above half the island, and remain long frozen; or to the number of forests that totally intercept the rays of the sun.

The island of St. John is situated partly between the continent and Cape Breton, whence it has nearly the same climate; but greatly exceeds that island in its pleasantness, and the fertility of its soil. It is about sixty miles in length, has a commodious harbour, and abounds with a variety of useful timber and most kinds of game common to the neighbouring country.

VEGETABLES.

THE mountains of Jamaica are in general crowned with trees of a thousand different species, ever verdant, forming groves and cool retreats, and irregularly mixing their branches in a beautiful

Digitized by Google

sort of confusion; the cedar and other tall trees rearing their lofty heads, and the lignum vitæ, mahogany, and numberless others thriving under their friendly shade. The valleys too are generally verdant, being refreshed with so many streams; but their greatest beauty consists in the plantations that adorn them, laid out with the nicest art, and producing as choice and valuable plants as any in the universe, particularly the sugar-cane*, of whose culture, the preparation of sugar, &c. we shall here give an account, which may serve likewise for Barbadoes, Antigua, Nevis, and the rest of our sugar-islands; for not only the commodity, but the manufacture of it, is in all of them nearly the same.

The reed or cane, which yields us such an agreeable juice, is like those others we see in morasses and on the edges of lakes, excepting that

* It is a question not yet decided among botanists, whether the ancients were acquainted with this cane, and whether they knew how to express its juice? All that we can gather from the arguments advanced on either side is, that, if they knew the cane and the juice, they did not know the art of condensing, hardening, and whitening it, and consequently knew nothing of our sugar. Salmasius however assures us, that the Arabs have used the art of making sugar, such as we now have it, above eight hundred years.—Another question among naturalists is, whether sugar-canes be originally of the West Indies, or whether they have been translated thither from the East? The learned of the last ages have been much divided on this point; but, since the dissertation of father Labat, published in 1722, there is no longer room to doubt but that the sugar-cane is as natural to America as India. All that can be said in favour of the latter is, that the Spaniards and Portuguese first learnt from the Orientals the art of expressing its juice, boiling it, and reducing it into sugar.

Digitized by Google

the skin of these latter is hard and dry, and their pith void of juice, whereas the skin of the sugar-cane is soft, and the spungy matter or pith it contains is very juicy, though in a greater or less degree according to the goodness of the soil, its exposure to the sun, the season it is cut in, and its age; which circumstances contribute equally to its goodness and its bulk. It usually grows to the height of six or seven feet, sometimes higher, exclusive of the long, green, tufted leaves at top, from the middle whereof arise the flower and the seed. The stem or stalk is divided by knots or joints, from whence likewise shoot out leaves, but these usually fall as the cane rises; and it is a sign either that the cane is not good, or that it is far from its maturity, when the knots are beset with leaves. The cane is yellowish when ripe, and about an inch in diameter; and its juicy pith is then eaten freely, being very nourishing and wholesome if taken with moderation. The tops of the canes are likewise reckoned good food for horses and black cattle *.

The ground fit for sugar-canes is that which is light, soft, and spungy, lying on a descent proper to carry off the water, and well exposed to the sun. The usual manner of planting them is by digging long trenches, about six inches deep and as many broad, and about two feet distant

* Mr. Smith tells us, that the bottom part of the sugar-cane top is about the thickness of one's finger, and that at Nevis they cut it into pieces about an inch and a half long, to give to their horses, being a very heartening food, and fattening them apace. They also give them the skimming of the sugar-coppers; but that must be done sparingly at first, for fear of griping and perhaps killing them.

Digitized by Google

from each other, laying a double row of canes along them from end to end. From every knot of the canes thus laid down in the furrows shoots up another cane; and these young ones grow to the heighth of eighteen or twenty inches in about twelve weeks time, but do not arrive to maturity till they have been a year or fifteen months in the ground. The next care of the planter is to keep his canes free from weeds, and to observe whether any of his roots have failed, that the trenches may be supplied in time with others; for, the crop being, by a neglect in either case, partly ripe and partly green at the same time, they cannot well be separated without more labour than they are worth, and then the planter burns them, as they stand. By this means indeed he loses a crop, but he does not lose his planting; for, the fire not touching the roots, they soon shoot out again, the soil is much improved, and swarms of rats are destroyed, which often do great damage in these plantations. The present practice is to dung the canes, either when they are planted, or when they come to be two feet high; and this is the planter's greatest trouble and expence, for, were it not for this dunging, much fewer negroes would be required.

When the canes are ripe, they are cut up one at a time by a proper instrument, being too large to be mowed by a scythe; and, as they cut them, they trim them and chop off the tops, which, as above intimated, are reserved for the cattle. The canes are then bundled up in faggots, and carried to the mills, which are very curious machines, contrived to bruise them and express the liquor or juice therein contained. These mills are composed of three wooden rollers covered with plates of iron, and are of four kinds, being turned

Digitized by Google

either by slaves, water, wind, or cattle. Those turned by the hand were first in use, but are now laid aside, as being an intolerable hardship to the poor negroes who were doomed to that work, besides the slowness of their progress. Windmills are the most modern, and are not yet very common, except in Barbadoes and St. Christopher's, and among the Portuguese. These make good dispatch, but have this inconvenience, that they are not easily stopped, which proves sometimes fatal to the negroes who feed them.

The juice coming out of the canes, when pressed and broken between the rollers, is conveyed by a leaden canal into the sugar-house, which is near the mill, where it falls into a vessel, and thence runs into a copper or caldron, to receive its first preparation, only heated by a slow fire to make it simmer. With the liquor is here mixed a quantity of ashes and quick-lime; the effect of which mixture, together with the action of the fire, is, that the unctuous parts are separated from the rest, and raised to the top in the form of a thick scum, which they keep constantly taking off, and serves to feed poultry, horses, &c.—The juice in the next place is purified in a second copper, where a brisker fire makes it boil; and all the time the casting up of the scum is promoted by means of a strong lye composed of lime-water and other ingredients.—This done, it is purified in a third boiler, wherein is cast a lye that assists in purging it still farther, making its impurities rise to the surface, whence they are taken with a skimmer.—Hence it is removed to a fourth boiler, where it is farther purified by a more violent fire; and hence to a fifth, where it is brought to the consistence of a syrup.—In a sixth boiler the syrup receives

Digitized by Google

its full coction; and here all the impurities which the former lyes had left are taken away by the injection of a new one, and a water of lime and alum. In this last copper there scarcely remains a third of what was put into the first, the rest being wasted by frequent boilings and skimmings. It is to be observed, that the size of the several coppers always diminishes from the first to the last, each being provided with a furnace to give a heat proportionable to the degree of coction the juice has received. In some large sugar-works there are also particular coppers for boiling and preparing the skimmings for farther uses.

By thus passing successively a number of coppers, the juice of the canes is purified, thickened, and rendered fit to be converted into any of the kinds of sugar hereafter mentioned, which are all prepared in the American islands. According to F. Labat, these are, 1. Crude sugar, or moscovado, which is that first drawn from the juice of the cane, and whereof all the rest are composed. The method of making it is that already described for sugars in general; but here we may add, that, when taken out of the sixth copper, it is put into a cooler, where, after stirring it briskly together, it is let stand to settle, till a crust, as thick as a crown-piece, is formed thereon. The crust being formed, they stir it again, then put it into vessels, where it stands to settle till it be fit to barrel. 2. Strained sugar, though somewhat whiter than the former, is prepared in the same manner, with this difference, that to whiten it they strain the liquor through blankets, as it comes out of the first copper; which invention is owing to the English, who likewise put the sugar into wooden forms or moulds, and, when

Digitized by Google

it has purified itself well, cut it in pieces, dry it in the sun, and barrel it up. 3. Earthed or clayed sugar is that which is whitened by means of earth laid on the top of the moulds it is put into to purge itself, and after a long process (too tedious to be here related) it is formed into loaves and baked, then pounded with huge wooden pestles, and put up in barrels. This is the white powder sugar. 4. Refined sugar is boiled and freed from its impurities by throwing in lime-water, eggs, and other ingredients, which the earthed sugar has not; in other respects the process is much the same, only more care and exactness is used, and the refined sugar is drier and whiter.—Several other sorts of sugar might be mentioned, but these seem to be the chief that are prepared in the sugar islands.

Here it seems proper to add, that in Canada and New England they obtain a species of sugar from the juice of a kind of maple-tree, by boiling it till ten gallons are reduced to a pint and a half, and then keeping it stirring to prevent its candying. A good tree, Mr. Dudley tells us, will yield twenty gallons of juice; and the physicians look upon the sugar to be as good for common use as that of the sugar cane, and to exceed all others in its medicinal virtue. The famous syrup of maiden-hair of Canada is made with this sugar; which, as brought to us, is of a greyish colour, and tastes like other sugar.

But we must not forget to mention another commodity produced from the juice of the sugar-cane, viz. rum, a spirituous liquor well known amongst us, and distilled in great quantities in Jamaica and Barbadoes. The particular process of this distillation we shall not attempt to describe.

Digitized by Google

but only observe, that Jamaica had for many years produced fine sugars, before the planters knew how to make rum; but, having learnt the art from those of Barbadoes, they are now reckoned to excel them in that commodity.

To this account of the sugar-cane and its produce perhaps it will not be amiss to subjoin a few observations on the qualities of sugar. Hoffman, speaking of sugar, says, that it is a temperate salt, and friendly to nature; but it has been a point much disputed, whether in general it is wholesome or otherwise. According to some, it is heating, emollient, resolvent, aperient, and calculated to resist putrefaction; good for the stomach, breast, and lungs; promotes expectoration, softens internal tumours, cleanses ulcers of the kidneys, bladder, and intestines, and hinders all corrosive substances from acting easily on the internal parts. According to others, it is injurious to scorbutic, hypochondriac, hysteric, and feverish patients, if used in considerable quantities: and others assert, that it impairs the appetite, weakens digestion, produces flatulencies, and generates cholics and dysenteries. It is also said to lay a foundation for the piles; and some foreign physicians have ascribed the frequent consumptions in England to the copious use of sugar. Whilst some assert that sugar generates worms, others are as positive that it destroys them. It is generally agreed, however, that the common coarse sugars foul the cutaneous glands and excite scorbutic spots and blotches. Rotten teeth are often the consequence of using sugar too copiously, and those who do so are likewise said to be liable to fevers. It is farther to be observed, that sugar in some degree differs in medicinal virtues according to its

Digitized by Google

degree of fineness; the moscovado, or that first procured from the cane, being more relaxing than the finer sugars. Loaf-sugar is said to animate the blood, to cut phelgm, and promote expectoration. Sugar-candy is most proper in colds, as it melts slowly in the mouth, and thereby gives time for the saliva to mix with it, and thus to blunt the acrimony of the phlegm.

The culture and management of indigo was formerly a very considerable and profitable business in Jamaica, where the plant grew in greater plenty than in any other of our colonies; insomuch that (according to the account of a gentleman who resided a good while in that island) the profits of the planters of it in the parish of Vere, where it was chiefly cultivated, were so great, that there used to be three hundred gentlemens' coaches at the parish-church on a Sunday. But whether it be owing to the want of seasons, or to the high duties laid on that commodity, (which the planters say was the case) at present there is not a stalk of indigo to be found in that parish, nor any other vestiges of its former prosperity. The duty laid by our legislature on indigo was three shillings and six-pence a pound, which could be borne when a pound weight of it was worth ten shillings, but on its falling to four shillings, was insupportable. We became sensible of this too late, and took off all duty upon indigo of our own growth; and there have been some attempts of late to revive this manufacture in Jamaica, but without success, the people there having lost the art. Indeed, in the year 1743, Mr. Macfarlan made a small quantity of very good indigo in the parish of St. Thomas in the vale; but we cannot learn whether other persons have followed his example. However, it

Digitized by Google

is pretty certain, that much of the indigo at present imported from our sugar colonies is the produce of the neighbouring French and Spanish plantations.

The cacao-tree, of which there are many walks or plantations in Jamaica, has been spoken of already; and therefore we need say no more of it here, but proceed to the description of the tree that produces the aromatic spice called pimento or Jamaica pepper, which grows plentifully on the hilly parts of that island. According to Sir Hans Sloane, the trunk of this tree is as thick as a man's thigh, rising straight up to the height of about thirty feet, covered with a very smooth skin of a grey colour, and branching out on every side. The ends of the twigs are set with leaves of several sizes, the largest being four or five inches long, and two or three inches broad in the middle, from whence they decrease towards each extremity. They are smooth, thin, and shining, of a deep green colour, without any incisures, and stand on long foot-stalks. When bruised, they are very fragrant, and in all things resemble the leaves of a bay-tree*. The extremities of the twigs are branched into bunches of flowers, each stalk sustaining a flower bending back, within which are many stamina of a pale green. These are succeeded by bunches of crowned berries, greenish when small, but big-

* A respectable author says, the leaves of the Jamaica pepper-tree can scarcely be distinguished from bay leaves, only they are of a much stronger aromatic smell. In Nevis, and we suppose in other islands where it grows, they adorn their churches with small boughs of it at Christmas, the fruit being green upon them, just as we do our churches in England with holly and ivy at that sacred season.

Digitized by Google

ger than juniper berries when ripe, and like them, black, smooth, and shining. They contain a moist, green, biting pulp, and two large seeds separated by a membrane, each of which is hemispherical, and both together form a globe. These trees flower in June, July, and August, but sooner or later according to their situation, and the different season for rain; and, after they flower, the fruit soon ripens. Where these trees grow, they are generally left standing when other trees are felled, and are sometimes planted where they never grew, on account of the great profit from the cured fruit, which is annually exported in large quantities to Europe. The curing and preserving this fruit for use is attended with no great difficulty, being usually done by the negroes, who climb the trees, and pull off the twigs with the unripe green fruit, which they carefully separate from the leaves and ripe berries, and then expose them to the sun for several days, spreading them thin on cloths, and turning them at intervals, taking care to keep them from the dews, which are very great in Jamaica. By this means they become dry and shrivelled, and from a green change to a brown colour, and then they are fit for the market. They are of different sizes, but generally of the bigness of black pepper; and, having a peculiar mixed taste and smell, somewhat resembling cloves, juniper berries, cinnamon, and pepper, they have obtained the name of all-spice. The smallest and most fragrant are accounted the best.—This fruit is the most temperate, mild, and innocent of all common spices, and preferable to all the East-India commodities of this kind, which it greatly surpasses in promoting digestion, attenuating viscidities, moderately heating and strengthening the stomach, expelling wind, and

Digitized by Google

doing those friendly offices to the bowels which we generally expect from spices. It is usually sold by the druggists for carpobalsamum, but it is not that fruit, and seems more fragrant and less balsamic.

The same learned author, from whom we have taken the preceding account of the Jamaic pepper-tree, describes likewise the wild cinnamon-tree, which grows in that island, and whose bark is commonly sold in the shops for cortex Winteranus, the bark of a tree so denominated from captain Winter who brought it from the straits of Magellan in his voyage with Sir Francis Drake. However, though these are barks of different sorts, and by their outward appearance seem quite different from each other, yet the one may be used as a succedaneum to the other, though the true cortex is much to be valued beyond the false, being far more aromatic.—The trunk of the wild cinnamon-tree is about the thickness of the Jamaica pepper-tree, and rises to the height of twenty or thirty feet, having a beautiful top, with many branches and twigs hanging downwards. It has an outer and an inner bark, the former whereof is of an aromatic taste, as thin as a shilling, of a grey colour, with some white spots here and there upon it, and several shallow furrows of a darker colour running variously through it. The internal bark is as thick as a crown piece, smooth, of a whiter colour than the external, and of a much more biting and aromatic taste, something like that of cloves, and not glutinous like cinnamon, but dry and crumbling between the teeth. The leaves grow on foot-stalks an inch long, coming out near the ends of the twigs without any order. They are two inches long, and one broad near the end, where

Digitized by Google

they are roundish, being narrow at the beginning, and increasing in breadth almost to the extremity. They are of a yellowish-green colour, smooth and shining, without any incisures about the edges, and somewhat resemble the leaves of bay. The extremities of the twigs are branched out into large bunches of flowers, each having a foot-stalk, and a calyx at the top made up of little leaves, wherein stand five scarlet or purple petala. These flowers are succeeded by many caliculated berries, the size of a large pea, being roughish and green, and containing within them a mucilaginous thin pulp, and four black shining seeds, of an irregular figure.

All the parts of this tree, when fresh, are very hot, aromatic, and biting to the taste, like cloves; and it grows on the low lands, or Savannah woods, and very frequently on each side of the road between Passage Fort and the town of St. Jago de la Vega, as also in Antigua and the other Caribbee islands. The bark of this tree is much in use both in the English plantations and in Europe; and it is easily cured, being only cut off and dried in the shade. The common sort of people use it in the West Indies instead of all other spices, it being thought good to correct the immoderate humidities of the stomach, to help digestion, &c. It is there, as well as in Europe, thought to be a very good remedy against the scurvy, and to cleanse and invigorate the blood, being used for those purposes by druggists and apothecaries under the name of the cortex Winteranus, which (as before observed) it is not, though it may very well supply its place. In the West Indies it is mixed and given with steel and other medicines; but Sir Hans says, if the patient be of a hot con-

Digitized by Google

stitution, it does more harm than good, being of a warm nature. If rum be mixed with this bark, it loses much of its disagreeable smell; and, if it be mixed with water, and distilled per vesicam, it yields an aromatic oil, sinking to the bottom of the water like oil of cloves.

The same learned naturalist observes, that in Jamaica and the neighbouring islands, as well as on the continent of America, there grow several sorts of misletoe, to which he gives the name of viscum, with an epithet to distinguish the various species. One of this family he calls viscum caryophylloides, from having its seed-vessel somewhat like that of a clove july-flower. The branches of this plant are encompassed with many brown small fibres, which take firm hold of the bark of the trees whereon it grows; not indeed like misletoe, which penetrates into the bark or wood on which it grows, but only interwoven and matted together, so as to afford the plant a firm support. From the leaves, which grow in the manner of leeks, it has obtained the name of wild pine or aloes. Each of them is two feet and a half long, three inches broad at bottom, and terminating in a point, having their insides concave, so as to be capable of containing a great deal of water, which in the rainy season falls upon the uppermost parts of the spreading leaves, and is thence conveyed by natural channels into the reservatory. The leaves, after they are swelled out like a bulbous root to form this bason or cistern, bend inwards, or come again close to the stalk, whereby they hinder the evaporation of the water by the heat of the sun. Below they are of a light green colour, and like leeks above; and from the middle of them rises a round, smooth, straight stalk

Digitized by Google

three or four feet long, that has several branches, and by incision yields a clear mucilaginous gum. The water, thus received in the cavities of the leaves, is not only necessary for the nourishment and life of the plant, but likewise very useful to men, birds, &c. who resort to it to quench their thirst, and seldom go away without refreshment. This vegetable grows on the arms or trunks of trees, especially when they begin to decay, the bark being then more disposed to receive the seed, and yielding more easily to the fibrils of the root of the plant.

But what is particularly surprising in this plant, is the contrivance of its seeds, which are oblong, pyramidal, and very small, covered with very soft hair or down, that they may be carried by the wind like the tomentous seeds of hieracium, lysimachia, &c. and the more readily adhere to the branches and prominent parts of the bark of trees. As soon as it sprouts or germinates, though it be on the under part of a bough, its leaves and stalk rise perpendicularly; for, if it had any other position, the reservatory before mentioned, made by the hollow leaves, could not be found, nor hold the water so necessary for the life and nourishment of the plant, and so useful to men, birds and insects.

The water-vine of Jamaica is likewise very serviceable on the same account; for Sir Hans informs us, that it grows on dry hills, and in the woods, where no water is to be met with; and its trunk, if cut into pieces, and held by either end to the mouth, affords so plentifully a limpid, innocent, and refreshing water, as gives new life to the thirsty traveller or hunter; so that the inhabitants of Jamaica, and the other islands where it grows,

Digitized by Google

look upon it as an immediate gift of Providence, to relieve them in their distress.

Sir Hans observes farther, that there are several plants in Europe which in some particulars resemble the viscum above described. "Thus," says he, "the virga pastoris, or wild teasel, has leaves enclosing its stalk, and so set by pairs opposite to each other, and joined by their basis, that they form a cavity fit to contain water, which undoubtedly contributes to the perfecting of the plant. Several fusi have been discovered to have seeds, which, when ripe, break out of their places, and, by means of a glutinous juice, fasten themselves to stones, or other substances, at the bottom of the sea where they are to grow. The common viscum has such a glutinous matter for fastening its seeds to the bark of trees; and small mosses, heretofore thought to have no seed, are now known to have it in great plenty, but so very minute, that our author saw it rise from the ripe head in the form of smoke, which undoubtedly is designed that the seed may be carried to walls, trees, and other places fit for its vegetation." Our author farther observes, that there are many species of plants with pappous or tomentous seeds, which, when ripe, are conveyed by the wind to places proper for their reception. A remarkable instance of this kind is the aster canadensis, which, though brought originally from Canada, is now become a wild plant in many parts of Europe, the seed having been carried by its wings or feathers to a great distance from the gardens wherein it was first planted. There are likewise many plants with seed-vessels so contrived, that they throw off the seed with a spring, and sometimes a brisk noise, to a considerable distance. Most plants

Digitized by Google

that have pods, as furze, crane's-bill, &c. have this mechanism in order to sow themselves; and amongst these, none is more surprising than a plant in Jamaica called spirit-weed, whose seed-vessel, when the seed is ripe, opens itself instantly upon the least touch of any thing that is wet, and with a noise throws the seed several ways; the design of nature being to keep the seed in its vessel, the best preserver of it from injuries, till the rainy season comes on, which is proper for sowing. The lychnis, poppy, &c. have their seeds in heads, which, being open at top when they are ripe, by their structure and the winds are scattered and directed to all quarters.—These and many other instances, very wonderful and obvious, show the great endeavours of nature to propagate the species, every one of which has probably been preserved to us from the creation to the present time.

In Jamaica there are three sorts of cotton-trees, one of which creeps like a vine, the second is thick like a bushy dwarf-tree, and the third is as tall as an oak: the last indeed is of no use in the cotton manufacture, but is of very quick growth, and so thick that they are very frequently scooped into canoes. The creeping sort we have already taken notice of; and, as for the second, after producing many beautiful flowers, it is loaded with a fruit as large as a walnut, whose outward coat is quite black. It bears pods five inches long, which, when fully ripe, open and discover a down extremely fine and white, which is the cotton. The people gather it as soon as it cracks, and its seeds are separated from it by a mill, as heretofore observed. The bark of the tree is brownish, the leaves small, and divided into three parts; and it

Digitized by Google

bears a flower about the bigness of a rose, consisting of five leaves of a bright yellow colour, which have several purple streaks towards the stem, and a yellow button or crown, surrounded with fibres of the same colour.

Ginger is another root that is cultivated in Jamaica, shooting forth blades in shape like those of wheat; and, when it is ripe, the roots are dug up and scraped by the negroes, to clear it of its outer skin, and kill the spirit, or else it would be always growing. If they have not hands enough to scrape it, they are forced to scald it; but this is sold much cheaper than what is scraped, which is white and soft, whereas the scalded will be as hard as wood.

The mastich-tree is a very hard timber, that grows to a vast height, and is generally used, like those called iron-wood and bulley-trees, for chariot-wheels and mill-work.—The soap-tree grows chiefly about Spanish-town, bearing berries as big as musket balls, which, without any other ingredient, is said to wash better than any Castile soap, though in time it rots the linen; but in reality this is no other than that species of the aloe-tree that was once shown by a Mr. Cowel at Hoxton.

The manchineel-tree is like the English dwarf apple-tree; but its leaves resemble those of the pear-tree in colour, shape and bigness. The fruit is of the size, shape and smell of an English crab, and, though fair to the sight, is a very rank poison, from whence some call it the Eve-apple. There is a thin glutinous matter about the sides of the leaf; and, if a person's face happen to touch one of them as he rides along the road, it will raise an immediate blister. Break a bough, and there issues

out a milk-white water, which is still more poisonous, and the fruit more than that. Our author adds, that he was credibly informed, that a man's shirt-sleeve, with the bark peeled off and brought to London, will, if one end of it be put into a pail of new milk, and stirred half a dozen times round, immediately turn the whole into curds and whey; so powerful is the strength of its poison, even at such a distance of time!

The Rev. Mr. Hughes observes, that, though the juice of this tree is one of the strongest poisons yet discovered, its effects have been greatly exaggerated; for it has been pretended, that the heads of those who sleep under its shade swell, and they become blind; that, if the leaves do but touch the naked skin, they raise pustules, attended with violent pains, which prove mortal, unless cured with water and salt, or fasting spittle; but this is not true, nor is any ill consequence to be feared from the leaves touching the naked body, unless they are bruised, and the white milky juice they contain is suffered to pervade the pores, which, if it does, it raises blisters like those of the confluent kind in the small-pox, causing acute pains; but simple drops of rain-water falling from the leaves upon the skin, have no ill effect, as Mr. Hughes himself has frequently experienced. The tree is of a very quick growth, and is seldom found growing to any perfection, but in a loose and sandy soil, near the sea, or other water. The trunk, when full grown, is generally from two feet and a half to three feet in diameter, branching most commonly from three to fifteen feet high from the ground. The timber is remarkable for its beauty; the heart, which is very small in proportion to the bulk of the tree, is hard and solid, of

a pale yellow, with a greenish cast, interspersed with small blackish veins, and the wood durable: the bark is of a sleek, whitish grey, the branches numerous, and covered with thick, smooth, shining leaves, among which are long pendulous catkins.

It bears a fruit resembling, in its form, the round sort of crab-apple we have in England, of a beautiful colour and fragrant smell. Yet the pulp does not exceed one-seventh of an inch in depth, the inside being a hard, stony kernel, in which are included the seeds. The juice of the apple is of the same colour and quality as that of the leaves; and yet Mr. Hughes says he has known a pregnant woman, who longed for them, eat of them without any apparent bad effect; but that he cannot say, the fragrance of the smell, or the tempting looks of the fruit, have induced others to follow her example, by so dangerous an experiment. Yet, if some of this crude, milky juice, only falls upon a horse, the hair of the part affected soon falls off, and the skin rises up in blisters that will require a long time to heal. Formerly no one dared to cut down these trees, without first making a large fire round them, in order to burn the bark, and dry up the juices that fly from them in cutting; but now negroes, entirely naked, venture to cut them down, only first rubbing their whole bodies with lime-juice, which prevents the sap from corroding or ulcerating the skin. Our author adds, that it is a remarkable instance of the goodness of God, that wherever a manchineel-tree grows, there is always a white wood, or a fig-tree, near it; the juice of either of which is an infallible antidote against the poison. Salt water is equally efficacious; and as the manchineel-trees grow by the sea-side, this remedy is likewise near at hand.

Digitized by Google

The trees in Barbadoes, as well as in the neighbouring islands, are perpetually bearing fruit or blossoms; so that at the same time one may see the blooming beauties of the spring, and the mature glories of the summer. Here are all sorts of oranges and lemons, sweet, sour, and seville in abundance, which last are large, and their juice delicious. The fragancy of the juice is as remarkable as the beauty and size of the fruit; and the weight of the citrons often bend the branches of the tree to the ground. With the rind or peel of citrons the ladies of Barbadoes make the finest cordials and sweetmeats; and indeed they are generally allowed to excel the English in the art of conserving, having the advantage of the finest sugar and fruits, with abundance of choice roots, &c. that are both wholesome and agreeable to the palate.

The lime-trees in Barbadoes are as prickly as our holly-bush, and they were formerly used by the planters for hedges. The tree grows seven or eight feet high, full of leaves and fruit, which so much resemble a lemon, that they are hardly to be distinguished at a little distance. Since punch has been a fashionable liquor in England, some tuns of lime juice have been annually imported to our island. China limes are frequent there, also China or sweet lemons, of which the latter are of most use and value. The tamarind and palm-tree are not natives of Barbadoes, but were brought thither many years ago. Here are also fine pine-apples, with aloes, mangroves, calabashes, cotton-trees, bulley-trees, mastich-trees, cedars, cacao-trees, and other vegetables already described.

There are some plants however, that grow in Barbadoes, which deserve more particular notice;

Digitized by Google

as the fig-tree, which has a trunk about as big as an elm, though the fruit is less than a cherry, insipid, and little regarded. The trunk shoots out beards or fibres, which take root in the ground; and, if suffered to grow, would become a grove; from whence we are apt to imagine it is the same as the banian-tree mentioned in the East-Indies.

The cassia fistula, which has been heretofore described, is also common in Barbadoes, and is a tree of such rapid growth, that it has been known to rise eight feet in a year's time. This is a straight-bodied tree, thirty feet high, with spreading branches, from which hang the pods, which are about twelve inches long, and of a dark brown colour. The plantain-tree is also remarkable for its quick growth, and three or four stems shoot from one root; but there is a wild sort, which is of a scarlet colour, and the fruit good for nothing. A tree also grows in this island, that bears large yellow plumbs, which, being steeped twenty-four hours in water, and then strained, make a good drink. Guana-trees, which yield a tolerably pleasant beverage, and soap-berries, about the bigness of a sloe, grow likewise in great plenty.

The guava is a tree common in Barbadoes and the neighbouring islands, as well as on the continent, somewhat resembling a cherry-tree, and bearing a fruit of the size of a small lemon, which has a soft but thick rind, and is of a delicate flavour. The rind incloses a pulpy substance, which is not unlike a quince, and makes the best jelly and marmalade that can be imagined. What is remarkable of this tree, it has been known to bear fruit when not above six inches out of the ground, though it grows to the height of eighteen or twenty feet.

Digitized by Google

The custard-apple, which grows on a tree of a fine clear red colour, is eaten by the servants and slaves, being kept a day after gathering, when they take out the pulp, which is like a custard, with a spoon. The pomegranate has small leaves of an olive green, and grows in Barbadoes, but the fruit is not so large as in the southern parts of Europe. The prickled apple-tree bears a fruit shaped like a heart, which is of a pale green colour, and tastes like a musty lemon.

One of the most singular trees is the cabbage-tree, by some authors called the palmeto-royal, as exceeding all the other trees in height, beauty, and proportion. The trunk, says Mr. Hughes, bulges out a little near the ground, which gives it the appearance of a substantial basis, to support its towering height. It is generally as straight as an arrow, and scarcely can any pillar be more regular, especially when it is of about thirty years growth. It rises above an hundred feet in height, and the trunk near the earth is then about six or seven feet in circumference, the whole body growing tapering to the top. The colour of the bark is like that of the ash-tree, and is faintly clouded, at the distance of every four or five inches, with the marks of the fallen branches: this colour of the bark continues till within about twenty-five or thirty feet of the extremity, where it changes from an ash colour to a beautiful sea-green, and this continues to the top. About five feet above the beginning of the green part, the trunk is encircled with its numerous branches, all the lowermost spreading horizontally with great regularity; and the extremities of many of the higher branches bend waving downwards, like plumes of feathers. These branches, when full grown, are about

Digitized by Google

twenty feet long, and are thick set on the trunk, rising gradually above each other; and the top is terminated by a beautiful upright, green, conic spire. These branches have a great number of green pointed leaves, some of them nearly three feet long, and an inch and a half broad, but gradually decreasing in length, towards the extremities of the branches. It is observed that the lowermost branch drops monthly from the tree, carrying with it an exfoliated circular lamen of the green part of the tree, from the setting on of the branches, to the ash-coloured part. This, and the branch, to which it is always fixed, fall together. When the loss of this lower branch happens, the green conic spire, which issues from the centre of the uppermost branches, and rises superior to all, bursts and throws, from its side, a young branch, which continues the uppermost, till another of the lowermost branches drops off; and then the spire sends forth again another branch, superior in situation to the last; and thus the loss of the branches below is supplied by those above. The inside texture of the leaves consists of many longitudinal threads like filaments, which, being spun, are used in making cordage of every kind, and also fishing-nets. What is called the cabbage, lies in many thin, white, brittle flakes, which have something of the taste of almonds; and, when boiled, is sweeter and more agreeable, than the best cabbage.

The locust-tree, whose timber is used in windmills and other buildings, grows likewise in Barbadoes, just in the form of a Tuscan pillar, being less and less all the way from the bottom to the top. Iron-wood, so called from its weight and hardness, is of a dark-red colour, and blossoms

Digitized by Google

both in March and September. Here are also red-wood, prickled yellow-wood and lignum-vitæ.

Ginger is very common in Barbadoes, and red pepper of two sorts, one of them called bonnet, and both very hot and strong-scented. Here also are grapes, but not so good as on the continent. The cucumbers and melons are very large and fine, and especially the water-melons are extremely refreshing, and reckoned good for the stone. The sensitive plant, the humble plant, and the dumb cane, are also frequent in this island, with many other vegetables brought hither originally from England.

Besides the Damask and Provence roses, which may be seen in bloom all the year round, here are various sorts of beautiful flowers, particularly that called the St. Jago flower, the smell of which however is very disagreeable. The passion-tree, whose blossom is here called the vinegar pear-flower, creeps along the ground like ivy; or else, with the water lemon-flower, is turned over arbors like our honey suckles. The flower, called in England the merveille de Peru, goes in Barbadoes by the name of the four-o'clock flower, because it opens in the evening. The flower is larger than a primrose, of the finest purple colour, and the seed is black, with an eye of purple.—There is a sort of cabbage in this island, called the seven-years cabbage, which is much sweeter than ours, and shoots out many slips that produce others when transplanted. There is likewise plenty of excellent pulse; but the European apples, pears, cherries, gooseberries, and other shrub-fruits, do not thrive well. Of the potatoes of this island the inhabitants make a brisk small-beer called mobby.

Among the vegetable productions of Nevis,

there are water-melons, of five or six different sorts, some of which are as large as a man's head, and will melt in the mouth like a peach. Here also are musk-melons, shaddocks, penguins, belle-apples, sea-side grapes, and cashew cherries.

The shaddock is a fruit shaped like an orange, and not unlike it in taste, though it has not so rich a flavor. It is of a beautiful lemon colour, and as large as a man's two fists. Penguins are of two sorts, one of which is round, about the size of an apple, and has a thick husk that covers the fruit, which is of a milk white colour, and full of small black seeds. They are an agreeable fruit, tasting somewhat like a strawberry, and are sometimes called by that name. The other sort, which is smaller and very tart, is chiefly used for gargling the mouth in fevers.

Belle-apples are about as big as a small golden pippin, of a deep yellow colour, taste like a gooseberry, and contain numerous little seeds, like those of that fruit.—Sea-side grapes grow in large bushes on trees as big as apple-trees, and near the sea shore, as their name implies. They are of a red colour, and of a very sweet taste. The cashew cherries grow on a tree resembling the English dwarf apple-tree, but the leaves are of a lighter yellowish green. The fruit is generally of a deep yellow, but sometimes of a palish red; its shape is conical, with the lesser end towards the stalk; and it is about the size of a middling pear. At the top of the cherry, in a little cavity grows the stone, by some called a nut, quite bare, and exactly shaped like a sheep's kidney. It is about an inch long, containing a kernel of a fine taste, but the fruit itself has a harsh and uncommon flavour. A certain author tells us of a very singular use made

Digitized by Google

of this stone by the young ladies in the West Indies, who, when they fancy themselves too much tanned by the scorching rays of the sun, rub their faces all over with it, after having previously scraped off its thin outside skin. This causes their faces to swell, grow black, and the skin being thus poisoned comes off entirely in flakes in five or six days; so that they cannot appear in public for a fortnight at least, but then they have got a new skin that looks as fair as that of a young child. In the pores of this stone or nut, it seems, there is lodged a sharp aromatic oil, of a caustic quality, which, if applied to the tongue, occasions an uneasy sensation for several hours; and it is this oil that takes off the skin of the face. Now, though this is frequently practised, our author does not remember above one lady who owned that she herself had tried the experiment. The whole operation she acknowledged was painful; but alas; what will not pride attempt?

The calabash-tree is likewise the produce of Nevis, St. Christopher's and several other of the Leeward islands. It spreads like a large apple-tree, and bears a fruit almost as big as a man's head, quite round, but is of no use except for bowls, &c. after the inside (which is not fit to eat) is scooped out; and then the shell is almost as thin and light as the thickest sort of brown paper. It seems that spoons, bowls, and other utensils for the slaves to eat out of, are made of calabashes at Barbadoes.

There is a tree in Nevis and the adjacent islands called diddle-doo, of the size and shape of a codlin-tree, but with narrow thin leaves. It bears a beautiful blossom, of the finest yellow and scarlet colours, somewhat resembling the flowers of nas-

Digitized by Google

tuition. These are esteemed a sovereign remedy in the green-sickness, which distemper, however, is very rare in so warm a climate, and where the young ladies so frequently use the exercise of dancing and riding on horseback, which all together keep the blood and other juices of the body in their regular courses.

In the pastures of Nevis there is a bush, growing about two yards high, called a sage-bush, the leaves whereof are not to be distinguished from those of the broad green sage, either by sight or smell. The tea made of it is of a fine yellow colour, but so extremely bitter, that the best refined sugar cannot render it palatable.

There are jessamine bushes at Nevis (not nailed to the walls as in England) which bear flowers full as large as primroses, of a very fragrant smell. These flowers are as white as snow, and so thickly set together, that the whole bush, at a little distance, looks as if it were covered with a white Holland sheet.

We ought not to omit a very singular sort of vegetable which Mr. Smith describes, though he cannot recollect its name. It has neither roots, branches, leaves, nor flowers, but is round and about as thick as a common whipcord, and runs along the tops of bushes all manner of ways, till it exceeds a hundred yards in length. It is of a most beautiful yellow colour, and entirely different from the bush which breeds and nourishes it; so that our author makes it a query, whether it may not be of the misletoe kind, though he never saw it growing on bulky trees.

Another singularity our author takes notice of is, that in the mountain-plantations at Nevis, where they have asparagus produced from London

Digitized by Google

seed, he has known it fit to cut in three months from the time of its being sown; for there, instead of transplanting the roots, they let it run up to wood, in order to shade the bed from the scorching rays of the sun; and the young ones that grow up under that wood they cut for boiling: but by this means a bed will not hold good much above two years, and the asparagus is never large.

We shall close our account of the vegetables of Nevis with a plant called cassada, which is remarkable for being of a poisonous quality, and yet affording a good sort of bread to the inhabitants of many parts of the West Indies *. Cassada is a shrub four feet high or upwards, the stem of it being straight, tough, brownish, and very knotty, just like a crab-tree stick; and at the top it is beset all round with long narrow leaves of a deep green colour. In order to make bread of this plant, the root of it is carefully scraped till the white part appears, and then it is rubbed hard against a tin grater about two feet long, shaped like a nutmeg-grater, and nailed fast to a piece of wood; and, being very juicy, it is soon reduced to a soft matter resembling children's pap. This substance is then put into a hair bag, and pressed hard between two stones, till there runs from it a milk-white liquor of a disagreeable smell, and which is rank poison; for, if a turkey, hen, or other fowl, hap-

* Dr. Durham observes, that many plants, animals, and minerals, which in one form are destructive to mankind, in another are useful and healing; and as one instance he mentions the cassada plant, which unprepared poisoneth, but prepared is the very bread of the West Indies. Sir Hans Sloane says, it is used to victual ships, and is of the most general use of any provision all over the West Indies, especially in the hotter parts.

Digitized by Google

pen to get to the press and taste this juice, it instantly dies. After this the cassada is laid in the open air, that the heat of the sun may exhale what poisonous particles the press could not squeeze out; and, being thus dried it is sifted through a sieve, made into thin cakes, and baked upon a bread iron kept entirely for that purpose. Our author was an admirer of this bread, and assures us it made excellent puddings.

The Bermuda islands produce some fine fruits, especially oranges, which are reckoned very delicious, and used formerly to be brought into Europe. The cedars that grow here are said to excel in many respects those of other parts of America; particularly in the fragrancy, durableness, beauty, and hardness of their wood; and here is such plenty of them, that they are used in building sloops, brigantines, and other vessels, as well as in the churches and some of the houses: and it is to be observed, that ships built at Bermudas are reckoned as good as any throughout the West Indies.—The palmetto, or wild palm, is also very useful, the wood being serviceable for building or fuel, and the leaves, which are eight or ten feet long, making a good covering for the houses.

The woods of Bermudas afford several medicinal vegetables, and among the rest one that bears a berry of a styptic quality, used by the English to cure those fluxes with which they are commonly afflicted by eating too frequently of the palm-berry or other delicious fruits. But there are two plants particularly remarkable, the one for its use, the other for its noxious quality. The first is the red-wood, so called from its fine tincture, especially that of its berry, from whence proceed little worms, which afterwards become flies, some of them larger

Digitized by Google

than the cochineal fly, and said to exceed that insect in their medicinal virtue. The other is a weed which grows in the manner of English ivy, and (according to the account of a gentleman who had resided a long time at Bermudas,) it is of so poisonous and subtil a nature, as to affect a person passing close by it, in such a manner as to peel the skin off his face. However, it appears from the same gentleman's account, that it does not afflict all constitutions alike; for he asserts that he has chewed it in his mouth without feeling any unpleasant effect.

Tobago, besides producing the different kinds of wood found in the other West India islands, bears both the true nutmeg and the cinnamon-tree, with that which produces gum-copal. It is said also to produce five different kinds of pepper, with Indian and Guinea corn without culture. The figs that grow here are as good as those of Spain and Portugal. The pine-apple, the prickle-apple, oranges, lemons, and limes, are found here in plenty; and excellent marmalade is made of the guavas. Here are also the finest plantanes, tamarinds, grapes, custard-apples, mammee-apples, papaw-apples, cocoa-nuts, musk, and water-melons.

The sides of the hills in Dominica are said to bear the finest trees in the world; indeed it is esteemed one of the best of the Caribbee islands on account of its fruitful valleys, extensive plains, and fine rivulets. It produces among other fruit, the finest figs, and in general its produce is much the same as that of the other Caribbee islands.

The Granadilloes all produce very fine timber, as well as fruit-trees; particularly the latin-tree, which has a tall trunk, and instead of boughs bears

Digitized by Google

leaves like fans, with long stalks, which being tied together, serve to cover the roofs of houses.

Amongst the vegetables of Guadalope, Father Labat found the copau-tree, famous for its healing balsam or oil, which he says he had sought for in vain throughout all the other French islands. This tree grows to the height of about twenty feet; having a leaf like that of an orange-tree, only somewhat longer and more pointed, and of an aromatic smell; as is also its bark when rubbed between the fingers. The balsam is obtained by making incisions in the bark of the tree, and is recommended by the abovementioned author as a specific for almost all maladies, both internal and external.—Here Labat likewise found the milk-shrub, whose leaf resembles that of the laurel, only it is larger, thicker, and softer; and its fibres, when pressed, yield a liquor just like milk both in colour and consistence. It bears flowers much resembling those of jessamine, being white, and containing in the middle a little oval bud, which encloses two small black seeds, from whence the plant is propagated. Its bark is of a pale green without, and white within, and its pith is like that of elder.—In this island there is also a tree called corbary, which bears fruit in a shell containing a pulp of a saffron colour, and yields a transparent gum, which, when hardened by the sun, is used among the native Caribbees for bracelets and other ornaments.

ANIMALS.

Few colonies are so well stored with cattle as that of Jamaica. The horses, asses, and mules are

Digitized by Google

cheap, the cows and oxen large, and there would be much greater numbers of black cattle, but that the English are more attentive to planting than grazing, which has so lessened their stock of cattle, that they are supplied with flesh from the northern colonies, and some of the neighbouring islands. Their sheep are generally large and fat, and the flesh good; but the wool being long and hairy, is good for nothing. Goats they have in abundance, and hogs, whose flesh is very good; but they have no deer nor hares. They have all sorts of fowl, both tame and wild; and more parrots than in any of the other islands. Pigeons, snipes, turkeys, geese, ducks, &c. are very common in Jamaica; and they have the pelican, a description of which we have formerly given from Sir George Wheeler. This bird lives upon small fish it picks out of the sea, and roosts at night on high rocks, sitting with its head towards the wind. It has a very long neck, covered with hair instead of feathers on the upper part, and below it has two membranous bags, or ventricles, stretching to the extremimity of its under bill, wherein it reserves its prey, when gorged with eating, or what is intended as food for its young. It appears slow and heavy in flight, but has a piercing eye to discern the little fry on which it subsists, and on which it falls down from a considerable height in the air, and catches them either on the surface of the water or by diving. The flesh of it has a fishy taste, which it looses by being covered two or three hours with earth.

The mountains of Jamaica breed numberless adders and other noxious animals, as the fens and marshes do the guana and galliwasp; but these last are not venomous. Of all the insects produced

Digitized by Google

in that island there is none so mischievous as the ciron or chegoe, which eats into the flesh of the negroes, sometimes making their toes bare to the very bone.

Here also are a sort of flies, called fire-flies, on account of their contracting and expanding their light as they fly. In the day-time they look green, but glow and shine in the night, and do so even some days after they are dead. By a few of them, it is said, one may distinctly read the smallest print, provided they are laid close to the book, and moved from line to line.

The island of Juan Fernandes formerly abounded with goats; but their number is greatly diminished, for the Spaniards, being informed of the advantages, which the buccaneers and privateers derived from the goats flesh, with which they were here furnished, endeavoured to deprive their enemies of this relief, by setting on shore a number of large dogs, which have increased so fast, that they have destroyed all the goats in the accessible part of the country, only a few remaining among the crags and precipices, where the dogs cannot follow them. These are divided into separate herds, which inhabit distinct fastnesses, and never mingle with each other. Our author mentions an extraordinary dispute between a herd of these animals, and a number of dogs. Some men, going in a boat into the eastern bay, perceived the dogs running very eagerly; and, being willing to discover what game they were pursuing, they lay upon their oars to view them, and at last saw them take to a hill, where looking a little farther they observed, upon the ridge of it, a herd of goats that seemed drawn up for their reception. There was a very narrow pass skirted on each side by preci-

Digitized by Google

pices, on which the master of the herd posted himself fronting the enemy, the rest of the goats being all behind, where the ground was more open. As this spot was inaccessible by any other path, except where this champion had placed himself, the dogs, though they ran up the hill with great alacrity, yet, when they came within about twenty yards of him, did not dare to encounter him, as he would infallibly have driven them down the precipice. They therefore desisted, and giving over the the chace, quietly laid themselves down, panting for breath.—There are but few birds, and those chiefly hawks, blackbirds, owls, and humming-birds.

Upon this island are great numbers of seals and sea-lions: the latter has some resemblance to a seal, but is much larger, and its flesh has some resemblance to that of beef. When full-grown, they are from twelve to twenty feet in length, and from eight to fifteen in circumference; and so extremely fat, that, having cut through the skin, which is about an inch in thickness, there is at least a foot of fat, before you come at either lean or bones. They are also very full of blood; for, if they are deeply wounded in a dozen places, there will instantly gush out as many fountains of blood, spouting to a considerable distance. Their skins are covered with short hair of a light dun-colour; but their tails and their fins, which on shore serve them for feet, are almost black; these fins are divided at the ends like fingers, the web which joins them not reaching to the extremities; and each of these fingers is furnished with a nail. The head, which is small, in proportion to the rest of the body, terminates in a snout, and they have whiskers like those of a cat, with small eyes and

Digitized by Google

ears; and the nostrils, which are also very small, are the only parts destitute of hair. In each jaw they have a row of large pointed teeth. The males have a large snout or trunk hanging down five feet six inches below the end of the upper jaw, which the females have not; and this renders it easy to distinguish the sexes; and besides the males are much the largest. These animals divide their time equally between the sea and land, continuing at sea all the summer, and coming on shore at the setting in of winter, where they reside during that whole season. In this interval, they ingender, and bring forth their young, having generally two at a birth, which they suckle with their milk, they being at first about the size of a full-grown seal. While the sea lions continue on shore, they feed on the grass and verdure, that grows near the banks of the fresh-water streams; and, when not employed in feeding, sleep in herds, in the most miry places they can find. As they are of a lethargic disposition, and not easily awakened, each herd places some of the males at a distance, which never fail to alarm them, when any one attempts to molest, or even to approach them; which they do by making a very loud noise, sometimes grunting like hogs, and at others snorting like horses in full vigour. The males have often furious battles, when they gore each other with their teeth, and cover one another with blood. The author of lord Anson's voyage takes notice of one whom he says they named the bashaw, he generally lying surrounded with a number of females, which no other male dared approach; but he had not acquired that envied pre-eminence without many bloody

Digitized by Google

contests, as appeared from the numerous scars visible in every part of his body.

The bay is most plentifully stored with the greatest variety of fish, particularly cod of a prodigious size, which are no less numerous than on the banks of Newfoundland; also large bream, silver-fish, cavallies, gropers, maids, a black fish much esteemed, called by some the chimney-sweeper, in shape resembling a carp; excellent cray-fish, that generally weigh eight or nine pounds, and are of an exquisite taste; besides congers of a peculiar kind, large sharks and dog-fish.

Some authors say there are snakes in Barbadoes about a yard long, which will climb the walls of a dairy, enter the windows, skim the milk, and so return back again, but never bite any body. The most offensive insect in the island is the cockroach, which is a large long fly, of a chocolate hue, that lays a long egg of a brown duskish colour, quite flat at each end, so that it looks like a bit of a small stick. This egg is glutinous, and will adhere to any thing, where it remains till the heat of the weather produces the young; and the singularity of it lies in its numerous brood, one single egg affording about twenty flies. A gentleman put one into a glass phial, and kept it there till it produced thirty young ones, which were of a whitish colour. This fly does not bite like a gnat, but lights upon any part of the body in the evening, at which time it is particularly troublesome.—There is also an insect called merry-wings, much like our gnats; and that mischievous one called a chege, as well as various sorts of ants, especially wood-ants, which destroy the timber in houses. These

Digitized by Google

ants are white, and, when squeezed, there issues a soft matter of the same colour.—The mastich fly, so called from its living upon the mastich-tree, is said to be so fragrant as to perfume the air, as it flies along. It is supposed to destroy the tree by a sort of rasp in its bill, with which it makes thousands of holes, and leaves the wood it consumes under the tree like saw-dust.

The neighbouring sea abounds with most sorts of fish, besides the green turtle, which is extremely delicious.—The parrot-fish, when come to maturity, will weigh twenty pounds, is well-tasted, and has scales like a carp; it is of a green colour, has sharp strong jaws, but no teeth, and feeds chiefly on other fish. The land crabs, though not peculiar to Barbadoes, but found in most of the neighbouring islands, may as well be described here, since they are common in that country.

The land crab has a smooth entire thorax, and the two last joints of its feet armed with spines. They are of various sizes, the largest about six inches wide: they walk sideways like the sea-crab, and are shaped like them; but they differ considerably in colour; some being black, some yellow, some red, and others variegated with red, white, and yellow mixed. Some of these are poisonous, and several people have died by eating them, particularly the black kind. The light coloured are reckoned best; and when full of flesh, are very well tasted. In some of the sugar islands they are eaten without danger; and are no small help to the negro slaves, who would frequently fare very hard without them.

These animals live not only in a kind of orderly society in their retreats among the mountains, but regularly once a year march down to the sea-

Digitized by Google

side, in a body of some millions at a time. As they multiply in great numbers, they choose the month of April or May to begin their expedition; and then sally out by thousands from the stumps of hollow trees, from the clefts of rocks, and from the holes which they dig for themselves under the surface of the earth. At that time the whole ground is covered with this band of adventurers, insomuch that a person cannot set down his foot without treading upon them. The sea is their place of destination, and to that they direct their march with the utmost precision. No geometrician could send them to their destined station by a shorter course, for they neither turn to the right nor left, whatever obstacles may intervene; and even if they meet with a house, they will attempt to scale the walls, to keep the unbroken tenor of their way. But, though this be the general order of their route, they, upon other occasions, are obliged to conform to the face of the country; and if it is intersected with rivers, they are then seen to wind along the course of the stream.

The procession sets forward from the mountains with the regularity of an army under an experienced commander. They are commonly divided into three battalions; of which the first consists of the strongest and boldest males, who, like pioneers, march forward to clear the route, and face the greatest dangers. They are often obliged to halt for want of rain, and to go into the most convenient encampment till the weather changes. The main body of the army is composed of females, which never leave the mountains till the rain is set in for some time, and then descend in regular battalia, being formed into columns of

Digitized by Google

fifty paces broad, and three miles deep, and so close that they almost cover the ground. The rearguard follows three or four days after; a straggling undisciplined tribe, consisting of males and females, but not so vigorous as the former. The night is their chief time of proceeding; but if it rain by day, they do not fail to profit by the occasion; and they continue to move forward in their slow uniform manner. When the sun shines hot upon the surface of the ground, they make a general halt, and wait till the cool of the evening. When terrified, they march back, in a confused disorderly manner, holding up their nippers, with which they sometimes tear off a piece of the skin, and then leave the weapon where they inflicted the wound. They even try to intimidate their enemies; for they often clatter their nippers together, as if to threaten those who disturb them. But though they thus strive to be formidable to man, they are much more so to each other; for they are possessed of one most unsocial property, which is, that if any of them by accident is maimed in such a manner as to be incapable of proceeding, the rest fall upon and devour it on the spot, and then pursue their journey.

When, after a fatiguing march, and escaping a thousand dangers, (for they are sometimes three weeks in getting to the shore) they have arrived at their destined port, they prepare to cast their spawn. They have no sooner reached the shore, than they go to the edge of the water, and let the waves wash over their bodies two or three times. This seems only a preparation for bringing the spawn to maturity; for, without farther delay, they withdraw to seek a lodging upon

Digitized by Google

land. In the mean time, the spawn grows larger, is excluded out of the body, and sticks to the barbs under the tail. This bunch is seen as big as a hen's egg, and exactly resembles the roes of herrings. In this state, they once more seek the shore, and shaking of their spawn into the water, leave accident to bring it to maturity. At this time whole shoals of hungry fish are at the shore, in expectation of this annual supply; the sea to a great distance is black with them; and about two thirds of the crabs eggs are immediately devoured by these rapacious invaders. The eggs that escape are hatched under the sand; and soon after, millions of these little crabs are seen quitting the shore, and slowly travelling up to the mountains. The old ones, however, are not so active to return; they have become so feeble and lean, that they can hardly creep along, and their flesh at this time changes its colour. Most of them, therefore, are obliged to continue in the flat parts of the country till they recover, making holes in the earth, which they cover at the mouth with leaves and dirt, that no air may enter. There they throw off their old shells, which they leave quite whole; the place where they opened on the belly being unseen. At that time they are quite naked, and almost without motion for six days together, when they become so fat as to be delicious food. They have then under their stomachs four large white stones which gradually decrease in proportion as the shell hardens, and, when they come to perfection, are not to be found. It is at this time that the animals are seen slowly making their way back; which is commonly performed in six weeks.

When possessed of its retreats in the moun-

Digitized by Google

taine, the land crab is impregnable; for, only subsisting upon vegetables, it seldom ventures out; and its habitation being in the most inaccessible places, it remains for a great part of the season in perfect security. It is only when impelled by the desire of bringing forth its young, and when compelled to descend into the flat country, that it is taken. At that time the natives wait for their descent in eager expectation, and destroy thousands; but, disregarding their bodies, they only seek for that small spawn which lies on each side of the stomach within the shell, of about the thickness of a man's thumb. They are much more valuable upon their return after they have cast their shells; for being covered with a skin resembling soft parchment, almost every part except the stomach may be eaten. They are taken in the holes, by feeling for them with an instrument, and are sought after by night, when on their journey, by flambeaux. The instant these animals perceive themselves attacked, they throw themselves on their backs, and with their claws pinch most terribly whatever they happen to fasten on. But the dexterous crab-catcher takes them by the hinder legs in such a manner that the nippers cannot touch them, and thus he throws them into his bag. Sometimes also they are caught when they take refuge in the bottoms of holes in rocks by the sea-side, by covering the mouth of the hole to prevent their getting out, and then soon after, the tide enters the hole and the animal is found, upon its ebbing, drowned in its retreat.

The historian of Nevis informs us, that they have a good spring and a short stream in that island, which afford them mud-fishes, generally

Digitized by Google

reckoned the richest fish they have; but, for his part, he always thought the cavally, a sea-fish, the finest eating of any. This last is a very firm fish, weighs four or five pounds, and tastes not unlike a mackarel. They have likewise a peculiar sort of cockles, which are delicious at the full of the moon, and increase and decrease in bulk as well as goodness, just as that luminary seems to increase or decrease to our sight. The shells are of a triangular form, but not equilaterally so, two sides of them being each as long again as the short side; and all the three angles are rounded off or blunted. They are of a bright shining colour, like well-polished white marble, and are generally streaked very regularly with beautiful red or blue veins. The manner of taking them is this: A negro goes into one of the sandy bays up to his knees, where stooping down he takes up a basket of sand from the bottom, which he dips into the water till the sand is washed away, and the cockles are left behind. It is remarkable, that this sort of cockle is not to be found, at any other of the Leeward Caribbee islands; nay, they have been carried to St. Christopher's, and would not propagate there, though the nearest end of that island is within four or five miles of Nevis.

A method of fishing, or rather fish-hunting, practised in Nevis, and described by our author, seems particularly worthy our observation. When seven or eight gentlemen have an inclination for this diversion, they send their slaves to the woods to get some of the bark that grows upon the roots of a tree called dog-wood, which is next morning pounded very small, put into sacks, and carried to the rocky part of the coast, where it is

steeped till it be thoroughly soaked with the salt water, and then well squeezed by the negroes to get out the juice. This juice presently stains the sea with a reddish hue, and, being of a poisonous nature, within an hour's time makes the fishes, such as old wives, rock-fish, welchmen, &c. so intoxicated as to swim on the surface of the water quite heedless of danger; when the negroes pursue them, and either take them by swimming or diving after them, their masters standing on the rocks to see the pastime. This poison kills millions of the small fry; and it is supposed that it must likewise destroy the shell-fish that lie at the bottom, and are less qualified to escape its effects by moving into purer water. Besides, as they naturally die every year in considerable numbers, it is no wonder that in the hurricane months their shells are cast up in abundance on the rocky shore of the island. That they are so cast up is certain, but it seems their colours are not bright or beautiful, till they have lain for some time upon the shore to be dried and polished by the heat of the sun, which scorches off such moss or filth as at first sticks about them, and hinders the eye from perceiving these inimitable strokes of nature's pencil with which they are adorned.

After having mentioned several beautiful shells, of which he sent specimens to England, our author gives us another remarkable particular relating to the productions of the sea about Nevis. The lobsters there, exactly resemble the English ones in size, colour, and shape, except that their two large claws are not so big in proportion to their bodies; but he had like to have lost his life by one circumstance attending them, which is this: such of them, it seems, as

Digitized by Google

are found on the western side of the island are reckoned fine eating, but those taken on the eastern are poisonous, which is attributed to some unwholesome sort of food they meet with there, by some imagined to be veins of copperas. This poison, as our author experienced, operates as a violent emetic and cathartic.

We have not yet taken notice of the porpus, a fish common in the European seas, but very different from those found in the American. In his voyage towards the Caribbee islands, Mr. Smith says, they were more than once pursued by millions of porpusses, which swam along by the ship like an arrow out of a bow, though they were then under a brisk gale of wind. They were at least two hours in passing by after that manner, the sea being covered with them as far as the eye could discern. They jumped up every moment, showing almost their whole bodies. Most of them were five or six feet long, having a head shaped somewhat like a hog's, and in colour, they were not unlike English minnows.—A day or two after, our author observed some of them with noses exactly formed like quart glass-bottles, and full as large; on which account they are not improperly called bottle-noses; but these are much bigger than the others, and differ very considerably from those found upon the British coasts.

The sheep of Nevis have neither horns nor wool, being hairy and smooth skinned, and generally full of red or black spots, resembling those of a fine spaniel. They breed twice a year, if not oftener; bring usually two, three, or four lambs at a time; and, what is more extraordinary, they suckle them all. The rams are of a pale red colour, with a thick row of long straight hair hang-

ing down under their throat, from their lower jaw to their fore legs. They have likewise plenty of goats, which, as well as the sheep, are very prolific.—Their porkers, being fed with Indian corn, Spanish potatoes, and sugar-cane juice during the crop-time, are very white and excellent food; their fowls, especially their turkeys, of which they have great plenty, are the same; their veal is small, fat, and white; but their beef is lean and tough.

At Nevis, it seems, they have excellent game-cocks, and fierce bull-dogs, notwithstanding the vulgar notion that they degenerate out of England. They have also cur-dogs; but no hounds nor spaniels, there being no game for them in that island. Some of the negroes are said to eat dog's-flesh; in which case the dogs, both of the bull and cur breed, are apt to fly outrageously at them; and the people there imagine they know them to be dog eaters, by some particular scent.—What our author adds is very remarkable, viz. that he never once heard of dog's running mad at Nevis, (notwithstanding the heat of the climate) as they too frequently do in England.

The most usual birds at Nevis are a small kind of screech-owls, noddies, spoon-bills, pelicans, wild and tame pigeons, and ground doves, which last are about the bigness of a lark, of a chocolate-colour, spotted with a dark blue. Their heads are like that of a robin, and their eyes and legs are of a fine red.—Here are likewise a few birds called mountain-thrushes, which are very fat, and resemble the English ones; and at one season of the year the island is visited by a few swallows.

As to animals of the lizard kind, Mr. Smith particularly takes notice of the guana, though he

Digitized by Google

never saw above three or four of them during his stay at Nevis; which scarcity he imagines may be in some measure occasioned by their flesh making excellent broth, and tasting deliciously, as he was credibly informed. From the nose to the end of the tail they are about a yard long, of the shape of a lizard, but walk far more upright upon their legs, and their eye (if possible) exceeds the lizard's in beauty. They are all over covered with scaly spots, each as broad as a silver penny, some of a deep black, and others of a perfect yellow. They are very harmless creatures, even to a proverb.

Lizards are very numerous in Nevis, from three inches to a foot in length; but they are too well known to require a particular description. There is a strange circumstance, however, mentioned by Mr. Smith, relating to a musical noise supposed to be made by the united voices of lizards, guanas, snakes, grasshoppers, &c. which we believe the reader will not be displeased to have an account of. As soon as day-light is well shut in, the said soft and agreeable noise begins, to describe which fully and truly he acknowledges he wants words to express his ideas. To give as just a notion of it as the nature of the thing will admit, imagine that in a mild and still summer's night, instead of the croaking of frogs and toads, you hear millions of the softest melodious notes strike up, almost at once, into as high a key as music can possibly rise to; and, though they seem to form no particular tune, yet are sweet and soothing beyond comparison. Our author thought the animals sung in concert; for when they were up at the highest key, they would all of a sudden stop together, and then presently swell their notes, and resume their wonted harmony as loud as before.

Digitized by Google

At other times they would raise and fall their notes in the most enchanting manner, and thus would their music last till day break. When he first heard them, he was so delighted that he stood motionless for some minutes; and afterwards left his company in the house, and went out six or seven times on purpose to listen to their bewitching music; and he affirms that he could not fall asleep for it till some hours after his getting into bed. —"In short," says he, "among many other reflections of that kind, it brought to memory Adam's answer to Eve, when she enquired why the moon and glittering stars should shine all night long, and exhibit so glorious a sight to the earth, when welcome sleep had shut up all eyes:—

"These have their course to finish round the earth
By morrow evening, and from land to land
In order, though to nations yet unborn,
Ministering light, prepared they set and rise;
Lest total darkness should by night regain
Her old possession, and extinguish life
In nature and all things, which these soft fires
Not only enlighten, but with kindly heat
Of various influence foment and warm,
Temper or nourish, or in part shed down
Their stiller virtue on all kinds that grow
On earth, made hereby apter to receive
Perfection from the sun's more potent ray.

These then, though unbeheld in deep of night,
Shine not in vain; nor think though men were none,
That Heaven would want spectators, God want praise;
Millions of spiritual creatures walk the earth
Unseen, both when we wake and we sleep:
All these with ceaseless praise his works behold
Both day and night. How often from the steep
Of echoing hill or thicket have we heard
Celestial voices to the midnight air,
Sole, or responsive to each other's note,

Digitized by Google

Singing their great Creator: Oft in bands
While they keep watch, or nightly rounding walk,
With heavenly touch of instrumental sounds
In full harmonic numbers joined, their songs
Divide the night, and lift our thoughts to heaven.

"Surely these supposed heavenly bands could not afford much finer music than did these little creatures. To be plain, my delighted soul joined most chearfully with them every night in ardent and repeated hallelujahs to the omnipotent source of harmony and love.—Our blessed Saviour, in addressing a vast multitude of people, who had thronged about to behold his stupendous miracles, and to hearken to his truly sublime sermons, doth aver, that even Solomon in all his glory was not so richly arrayed as a common lily of the Oriental fields. — An incontrovertible truth; for the nicest art is but a very faint imitation of nature. Now in my opinion, Solomon was in his highest elevation of glory, when he dedicated his beautiful temple to the great Jehovah; and yet I firmly believe that when the trumpeters and singers on that solemn occasion were as one to make one sound to be heard in praising the Lord, and when they lifted up their voices in concert with the trumpets, cymbals, harps, psalteries, sackbuts, and other musical instruments, they, even then, could not excel the harmony of these little creatures with which I was serenaded every night."

Among the insects found in Nevis, and other neighbouring islands, some travellers mention a curious one called the flying-tyger, because its body, like that of a tyger, is marked with spots of various colours. It is about the size of a large beetle, has a sharp-pointed head, and two large eyes as green

Digitized by Google

and sparkling as an emerald. Its mouth is armed with two very sharp hooks, with which it holds its prey; and its whole body is covered with a brownish crusty tegument. Under its two largest wings, which are also of a solid matter, are four lesser wings as thin as the finest silk. It has six legs, each of which has three joints, and is beset with little prickles. In the day-time it is continually pursuing other insects which are its prey; and in the night it lodges on the trees, where it makes a noise almost like a grasshopper.

There are horn flies of several sorts, particularly one about three inches long, which has two snouts like an elephant, the one turning upwards, the other downwards. It has a blue head, with two green eyes, encompassed by a small white circle. Out of its back rises a horn, shaped like a woodcock's bill, smooth on the upper side, and covered with down on the lower; which horn reaches to its head, where it has another resembling that of a beetle, black as ebony, and as clear as glass. Its wings are of a violet-colour, intermixed with carnation; and where the upper ones are expanded two lesser ones may be seen under them, as thin as those of the flying-tyger, and red as scarlet.

There is another pretty little insect with four legs, called a fly-catcher, whose colours are various and beautiful. It comes boldly into rooms, and will even light upon the table when people are eating, and catch the flies that crawl upon their clothes. Its method is to lie waiting for the flies, and, when it sees an advantage, it leaps directly on its prey, which it seldom misses. The small eggs these insects lay, they cover slightly

Digitized by Google

with earth, and leave them to be hatched by the sun.

In St. Christopher's there is a bird called the booby, which seems to deserve some notice. It is a large bird, of a dunnish colour; and, if one of them allght (as they now and then do) upon a ship's yard-arm, it will stand there till a sailor can climb up and catch it with his hands, all the while pecking and screaming out, but never offering to fly away; from whence it has justly obtained the appellation of booby.—Here also we may notice another bird, somewhat bigger than a pigeon, great numbers of which are found in a little island called Prickle-pear, to which the women of Anguilla, resort annually to strip them of their feathers; and the poor creatures, it seems, are so silly as to suffer these women to knock them down with sticks, as they fly about. It is somewhat strange however, as our author observes, that repeated experience does not teach them wit enough to keep farther off from such dangerous enemies.

There are such numbers of turtle caught at Bermudas, that the inhabitants make them their common food, their flesh being very white, tender, and delicious. Here are also a surprising variety of fowls, such as swans, ducks, widgeons, teals, snipes, hawks of several sorts, storks, herons, bitterns, cormorants, baldcoots, moorhens, &c. besides a multitude of sparrows and other birds of the smaller kind. There is likewise a sort of water-fowl peculiar to these islands, which are called cowkoes, and hatch their young in holes and burrows of the rocks like rabbits. They are as big as a sea-mew, and were formerly in great plenty; but, being of so gentle a nature as to be easily

Digitized by Google

caught, and their flesh being very good food, the inhabitants have made such havock among them that they are now rather scarce than numerous.—The tropic-bird is also frequently seen about Bermudas, which is a high-soaring bird, about the bigness of a partridge, of a milk-white colour, with a tail consisting only of one single white feather a foot and a half long. These birds are commonly met with about the tropics, whence their name, and often many hundred miles from land; which may also be said of the sheer-water, a brownish-coloured fowl, almost as big as a goose, which is very strong-winged, and frequently alights on the ocean.

They have such plenty and variety of fish about these islands, that they have not yet found names for many sorts of them, both of the scaly and shelly kind. Some whales are caught upon their coasts, chiefly in February, March, and April; but all their attempts to establish a whale-fishery have been unsuccessful. The Bermudans formerly drove some traffic in spermaceti and train oil, but that branch of their commerce is now decayed.

It is said there are no venomous creatures of any kind in Bermudas, but perhaps a greater variety of insects than in any other of our plantations in proportion to their size. Amongst these the spiders are very remarkable, for their extraordinary size and the strength of their webs. Their bodies consist of two parts, one flat, the other round, and both together, with the legs stretched out, are large enough to cover a man's hand. This monstrous bulk makes them look frightful, but the beauty and variety of their colours in some measure take off the distaste. The round part of their body is shaped much like a pigeon's egg, and under the flat part

Digitized by Google

grow their legs, five on each side, with four joints, and claws at the end. They have a little hole in their backs, and their mouths are covered with greyish hairs, intermixed with some red, and have a crooked tooth on each side, of a hard polished substance, and of a bright shining black; so that they are often set in gold or silver, to serve for tooth-picks. When these creatures grow old, they are covered all over with a sort of down, of a brown or blackish colour, very smooth, soft, and shining like velvet; and it is said they cast their downy skins every year, as well as the two teeth just mentioned. They show a wonderful skill and agility in spreading their webs from tree to tree, which, are so very large and strong, as to extend seven or eight fathoms, and when finished will ensnare a bird as big as a thrush.

In Guadaloupe there is a bird of passage, which Labat says he met with in none of the islands but this and Dominica. It is about the size of a young pullet, and its plumage is as black as jet; its wings are long and strong, its legs short, its feet like those of ducks, but armed with strong claws; and its beak crooked, sharp-pointed, and extremely hard. It has large eyes, with which (like an owl) it sees best in the night, when it catches fish out of the sea, which are its only food; and, if these birds are disturbed in the day-time, the light so dazzles their eyes, that they fly against a tree or any object in their way. Our author supposes they are the devil-birds, that are seen in Virginia and the adjacent countries, from May to October. From the beginning of October to the end of November they stay at Guadaloupe, after which they are not seen till about the middle of January. There is a mountain in the island,

Digitized by Google

from these birds called the devil's mountain, where they lodge in holes like rabbits, flying out to sea in the evening, and returning to the mountain in the morning. Here they lay their eggs and hatch their young, which are ready to fly about the end of May, and are very tender food, but their fat resembles oil. The flesh of the old ones is blackish, and has a fishy taste, but otherwise it is very good and nourishing. The negroes and poor people have scarcely any other sustenance than these birds during the season; and it may be deemed a great providence that they harbour in places so difficult of access, otherwise the French would long ago have destroyed the species.

Labat tells us, that he once indulged his curiosity to accompany four negroes in this kind of fowling, not without great fatigue and danger. It took them up six hours to get to the summit of the mountain, where they lay all night; and next morning, when the birds were returned from their fishery, the negroes repaired to their holes, with dogs trained up to the sport. Each negro carried a switch in his hand, seven or eight feet long, with a crook at the end of it; and, as soon as the dogs, which smelt at every hole, had discovered one with a devil-bird in it, they barked, and began to scratch up the ground at the entrance, but they were prevented from doing this by the fowlers, who thrust their switches into the holes, on which the birds either fasten with their beak, and suffer themselves to be dragged out rather than quit their hold; or else the crook is turned round the hole till one of the wings is entangled by it, and so the bird drawn out by force. Our author adds, that by noon they had taken a hun-

Digitized by Google

dred and ninety-eight of these birds, and acknowledges that he fed on them very heartily.

It is observable that the bees of Guadaloupe differ considerably from those of Europe in size and colour, as well as in the structure of their honey-combs, and the quality of their wax and honey. The bees are blacker and rounder than ours, but much smaller; nor do they seem to have any sting, or, if they have, it is too weak to pierce the skin. Their nests are in hollow trees, and their combs consist of little bladders of wax, of the form and size of pigeons eggs, but more pointed, and almost like the bladder of a carp. They deposit their honey in these bladders, which, though they may be easily separated from one another, are so artfully disposed and ranged, that there seems to be no vacuity between them. Most of the bladders are filled with honey, but in some of them there is a yellow matter, seeded like the eggs of a fish, glutinous, and smelling like honey. The honey is always liquid, of the consistence of olive-oil, and never settles. The wax is black, or at least of a deep purple colour; and Labat says, that all the art of his countrymen could not make it either white or yellow, so as to be fit for candles; besides that it is too soft for that purpose, and is scarcely used for any thing but to cement the corks of bottles after it is thoroughly purified.

Tertre says, that on the island of Marigalante there is a large grotto with a river in it, which runs a good way under ground, and abounds with large crabs. He adds, that there are several other large and deep grottoes in this island, which they call by the name of saints; and that for several miles along the coast there are vast high rocks, as even as if they had been cut by art,

Digitized by Google

and as full of holes as a pigeon-house, which are much frequented by the tropic-birds already described.—Among the fish that are found about this and the neighbouring islands are the lamantins, or sea-cows, which bring forth two young ones at a time, and suckle them with their milk like calves. There is also a fish called recune, about eight feet long, that kills other fishes by its bite, which is said to be as poisonous as that of a mad dog.

BUILDINGS, &c.

HAVANNAH, the chief city on the island of Cuba, was built by Diego de Velasquez, who conquered the island. It was named originally the "port of Carenas," but afterwards, when it began to increase, it was called "St. Christopher of the Havannah." In 1536 it was so inconsiderable, that being taken by a French pirate, he ransomed it for seven hundred dollars. Some time after, it was taken by the English, and a second time by the French; yet its value was not understood, nor any care taken to put it in a posture of defence, till the reign of Philip II. But since the accession of the house of Bourbon to the Spanish crown, it has been completely fortified.

This town is particularly famous for its harbour, which is, in every respect one of the best in the West Indies, and, perhaps, in the world. It is entered by a narrow passage, upwards of half a mile in length, which afterwards expands into a large bason; and is sufficient, in extent and depth, to contain a thousand sail of large vessels, having almost six fathom water throughout, and being perfectly sheltered from every wind.

Google

The city stands on the west side of the harbour; in a pleasant plain; and is the residence of the governor and other royal officers of Cuba. The buildings are chiefly of stone, and some of them superbly finished; among which are eleven churches and monasteries, and two handsome hospitals. The churches are remarkably rich and magnificent; the lamps, candlesticks, and ornaments for the altars being of gold and silver, and some of the lamps weighing near a hundred pounds. The Recollect's church has twelve beautiful chapels in it, and in the monastery are cells for fifty monks. The church of St. Clara has seven altars adorned with a profusion of plate, and the nunnery contains a hundred women and servants clothed in blue. The church of the Augustines has thirteen altars; and that of St. Juan de Dios nine, with an hospital for soldiers, of twelve thousand dollars revenue.

The city is supplied with water by the Lagida, which runs through it by two streams. The entrance to the harbour is defended on the east side by a strong castle called *El Moro*, situated on a high rock; and on the walls and bastions are mounted forty pieces of cannon. Under the faces of the south-west bastion of the Moro, and within the entrance of the harbour, is a stone battery called the *Twelve Apostles*, almost level with the water; and the guns carry each a ball of thirty-six pounds. A little higher, and opposite to the Point-gate, is the *Divina Pastora* or Shepherd's Battery of fourteen guns, level with the water. On the west side of the entrance at the Point, is a square fort called the *Punta* with four bastions well mounted with cannon. On the bastions of the town, next the harbour, are a number of cannon;

Digitized by Google

and about the middle of the city is the *Fuerte*, a square fort with four bastions, mounted with twenty-two pieces of cannon. In this last the governor resides, and his Catholic majesty's treasures are deposited till the arrival of the galleons.

On the land side, from the Punta-gate to the dock-yard, there is a rampart with bastions, faced with stone, and earthen parapets with a ditch, which in several places is fallen in, and is almost filled up, particularly behind the Punta and land gates, near the stone quarries, which, if joined to one another, might be of great detriment to the place in case of a siege, as a lodgement might be made in them. The ground here rises with an easy ascent to the land gate; and is either open pasture or garden ground, well stocked with cabbage trees. Before the land gate is a ravelin. The hill on a rising ground from this gate (which is the highest part of the town) to the dock-yard, is steeper than on the other side.

The fortifications of the Havannah, though strong, have many defects; and from the situation of the town and forts, are commanded by many eminences of which an enemy might take advantage. On the east side of the harbour, the Cavannas, on a part of which the Moro is built, commands in a great measure that fort, and absolutely commands the Punta, the Fuerte, and the whole north-east part of the city, which is the best fortified. On the west side runs a suburb called Guadaloupe, whose church is situated on an eminence about half a mile from the land gate, with which it is on a level, and higher than any other part of the fortifications. From the north side of this rising ground, the Punta gate may be flanked; and from the south-east side the dock-yard is commanded.

Digitized by Google

Along the north side runs an aqueduct, which falling into the ditch at the land gate, runs down to the dock-yard, both for watering the ships, and turning a saw-mill. About half a mile from the church is a bridge, thrown across a rivulet that runs into the bay about a hundred yards. From this bridge to the Lazaretto is about two miles, with a rising ground between them. And if a trench were thrown up betwixt these two places it would cut off the communication with the town by land. From these observations, therefore, it plainly appears that the Havannah is not impregnable.

The Havannah has greatly contributed to the maritime strength of Spain, many ships having been built here within these few years, from sixty to eighty guns: the island furnishing the finest materials, such as oak, pine, cedar, and mahogany. The only defect of the harbour is the narrowness of its entrance, for, though free from bars and shoals, yet only one ship at a time can enter it; from which circumstance the galleons have sometimes been insulted, and even captured, at the mouth of the harbour, the forts being unable to afford them any assistance.

Upon the rupture with Spain in 1762, the British ministry sent a squadron and army against this place, under Admiral Pocock and lord Albemarle. The Spaniards had in the harbour at that time a fleet of twelve sail of the line, two of them but just launched, two more on the stocks nearly finished, and several merchant ships. The men of war were almost ready for sea; but the governor had received no intimation of the projected attack. The place, however, was gallantly defended, and sustained a siege of two months and eight days

Digitized by Google

before it could be reduced; but at the expiration of that time a capitulation was signed, and a district of a hundred and eighty miles was yielded up along with the city. This conquest was the most considerable, and in its consequences the most decisive of any the English had made since the beginning of the war; and in no operation were the courage and perseverance of the British troops and the conduct of their leaders more conspicuous. The acquisition of this place united in itself all the advantages which can be acquired in war. It was a military atchievment of the highest class; by its effect on the Spanish marine it was equal to the greatest naval victory; and in the plunder it equalled the produce of a national subsidy. Nine line-of-battle ships were taken; three capital ships had been sunk by the Spaniards at the beginning of the siege; and two more were afterwards destroyed by the captors. The Spaniards on this occasion lost a whole fleet of ships of war, besides a considerable number of merchant ships; and in ready money, tobacco, and other valuable merchandise, the sum lost did not fall short of three millions sterling. Havannah was restored by the peace of 1763; and is of the greatest importance to Spain, being the rendezvous for all their fleets to return from America to Europe, lying at the mouth of the gulf of Florida, through which they are all obliged to pass. Here the Spanish navy stationed in the West Indies rides; and here the galleons, flota, and merchant ships from other ports, meet in September, to take in provisions and water, with great part of their lading, and likewise for the convenience of returning to Spain in a body.

St. Domingo, the capital of Hispaniola, is situ-

Digitized by Google

ated on the west bank of the Ozama, three miles below the mouth of Isabella river, where it is twenty-four feet deep, having a bottom of mud or soft sand, and banks twenty feet in perpendicular height. The port of St. Domingo is extremely magnificent; being a real natural bason, with a great number of careenings for the vessels that can get at them. There is a rock at the entrance which will only admit vessels drawing eighteen or twenty feet water, which, it is said, might be easily removed. But the road before the Ozama is very indifferent, and lies so much exposed, that it is impossible to anchor in it during the south winds, and the north winds drive the vessels from their moorings out into the sea, which here runs exceedingly high.

The city was originally founded on the east side of the Ozama, by Bartholomew Columbus, who gave it the name of "New Isabella." But Christopher Columbus gave it the name of his father, and the inhabitants of Isabella on the north coast of the island, removed to New Isabella in 1496. In the year 1502 a hurricane destroyed most of its buildings, which induced Orando to remove the inhabitants to the west side of the river. The new city was soon built, with a grandeur of design not unworthy of the first metropolis of the new world. The plan of it is a trapezium of about five hundred and forty fathoms on the east side, along the Ozama; near five hundred fathoms on the south, bordering upon the sea; and about eighteen hundred fathoms in circumference. On the west and north, the land is rough and rocky, for about half a league, but after that it becomes good and the country delightful. Towards the sea, the site of the city lies very high, and forms an insurmountable dyke

Digitized by Google

against the fury of the waves. It is also surrounded with a rampart eight feet in diameter, and about ten feet high. There is a great deal of ordnance at St. Domingo, but the fortifications are not strong; and the height of the Heignes commands it entirely.

The streets are spacious, and straight as a line, which gives the city a pleasing appearance. The greatest part of the houses first built are of a sort of marble found in the vicinity, and in the style of the ancient towns of Spain and Italy; those of a more recent construction are of a sort of *pise* called *tapia*. To erect these buildings, a case is made of planks between pillars of masonry; and this case is gradually filled with a reddish clay, which is rammed down as it is thrown in, until it forms a solid wall between the pillars. The clay thus pressed together acquires an amazing hardness, and the walls are sometimes so solid and strong, that the pillars are useless. The houses of St. Domingo are tolerably handsome, in a simple style, and nearly uniform. A considerable part of them, built within these twenty years, are of wood, covered with the leaves of taches of palm trees. The roofs are generally platformed, being shaped so as to conduct the rain water to the cisterns.

Among many public edifices that are worthy of attention, we may reckon the ruins of the house that Diego, son of Christopher Columbus, had begun entirely of hewn stone. The walls are yet remaining, and some of the sculpture round the windows. The roof and cielings, however, are fallen in; the lower floor is become a pen for cattle; and a Latin inscription over the portal is now hidden by the hut of a herdsman.

The cathedral is a noble Gothic pile, begun in

Digitized by Google

1512, and finished in 1540, after the model of St. Peter's church at Rome. It particularly merits admiration on account of the boldness of its vault, which, notwithstanding the ravages of earthquakes in its vicinity, has never till within these twenty years had a single flaw. Opposite to this pile is a spacious square, at the south-west end of which is the town house. Here also are three hospitals, a college, and a gaol. The convent of the Cordeliers was built by Ovanno in 1503, on a little hill, containing a mine of mercury. All the three parochial churches of this city are superbly adorned with pictures, statues of marble and of metal, vases of gold and silver, set with precious stones, &c. but the cathedral surpasses the others in every respect.

St. Jago, the capital of Jamaica, is situated in the south-east part of the island, on the bay of Port Royal. It is about a mile long, above a quarter of a mile broad, and contains about five hundred and fifty houses. It is situated in a delightful plain on the banks of the Cobre, thirteen miles from Kingston, and ten from Port Royal. It is the residence of the commander in chief; and the supreme court of judicature is held in it four times a year.

Port Royal, in the island of Jamaica, was once a place of the greatest riches and importance in the West Indies; but it has suffered so severely from earthquakes, hurricanes, and inundations, that it is now reduced to three streets, a few lanes, and about two hundred houses. It contains the royal navy yard for heaving down and refitting the king's ships; here also are a navy hospital, and barracks for a regiment of soldiers. The fortifications, which are very extensive, being in excellent order, and having been recently strengthened with

Digitized by Google

many additional works, it may be said to vie in point of strength with any fortress in the king's dominions. The harbour is one of the best in the world, and a thousand ships may ride in it, secure from every wind.

In the year 1692, an earthquake happened in Jamaica, which in the space of two minutes destroyed the town of Port Royal, and sunk the houses in a gulf forty fathoms deep. It was attended with a hollow rumbling noise like that of thunder: and the streets rose like the waves of the sea; first lifting up the houses, and then immediately throwing them down into deep pits. All the wells discharged their waters with the most violent agitation; the sea burst over its bounds and deluged all that stood in its way; the fissures of the earth were in some places so great, that one of the streets appeared twice as broad as formerly; and in many places it opened and closed again, continuing this agitation for some time. Of these openings great numbers might be seen at once. In some, the people were swallowed up instantaneously; in others the earth caught them by the middle, and crushed them to death, while others, more fortunate, were swallowed up in one chasm, and thrown out alive from another. Some chasms were large enough to swallow up whole streets; and others, still more formidable, spouted up immense quantities of water, drowning such as the earthquake had spared. The whole was attended with noisome stenches, the noise of falling mountains at a distance, &c.; and the sky suddenly turned dull and reddish, like a glowing oven.

Greatly as Port Royal suffered, however, more houses were left standing in it than on the whole

Digitized by Google

island besides. Scarcely a planting-house, or sugar-house, was left standing in all Jamaica. A great part of them were swallowed up, houses, people, trees, and all, in one gap; in lieu of which, afterwards appeared great pools of water, which, when dried up, left nothing but sand, without any mark that ever tree or plant had grown thereon. It was a remarkable circumstance, that although some houses were thrown several yards out of their places, yet they continued standing; and one plantation was actually removed half a mile from the place where it originally stood, without any considerable alteration. All the wells in the island, as well as those of Port Royal, from one fathom to six or seven fathoms deep, threw their water out at the top with great violence. Above twelve miles from the sea, the earth gaped, and spouted out vast quantities of water into the air; yet the greatest violences were among the mountains and rocks, and it is a general opinion, that the cause of the earthquake lay among them. Most of the rivers were stopped up for twenty-four hours, by the falling of the mountains; till at length they formed new channels, tearing up in their way, trees, &c.—After the great shock, those people who escaped got on board ships in the harbour, where many continued above two months; the shocks all that time being so violent, and coming so frequently, accompanied with frightful noises, and sulphureous blasts, that they durst not go ashore. The consequence of the noisome vapours attending the earthquake was a general sickness, which swept away upwards of three thousand people.

Bridge-town, the capital of Barbadoes, is situated in the innermost part of Carlisle Bay, which is ca-

Digitized by Google

pable of containing five hundred ships. This was originally a most unwholesome situation, and was chosen entirely for its convenience for trade; but is now deemed as healthy as any place in the island. The town, which contains about fifteen hundred houses, would make a figure in any European kingdom, and some contend that it is the finest the British possess in America. The houses, for the most part, are well built, and their rents are as high as those of such houses in London. The wharfs and quays are well defended from the sea, and very convenient; and the harbour is sheltered from the north-east wind, which is the constant trade wind there. But what renders Bridge-town the most desirable situation in the West Indies, is its security against attacks from foreign enemies. It is defended on the west by James fort, which mounts eighteen guns. Near this is Willoughby's fort, which is built upon a tongue of land running into the sea, and mounts twelve guns. Needham's fort has three batteries, and is mounted with twenty guns; and St. Ann's fort which is the strongest on the island, stands more within land. In short there is all along the lee-shore a breast work, and a trench, in which at proper places, are twenty-nine forts and batteries, having three hundred and eight cannon mounted; while the windward shore is secured by high rocks, steep cliffs, and foul ground.

The church of St. Michael in this town exceeds many English cathedrals in beauty, ornament, and convenience; and has a fine organ, bells, and clock. Here also are a free school for the instruction of poor boys, an hospital, and a college. The latter was erected by the society for propagating the Christian religion, in pursuance of the will of

Digitized by Google

Colonel Cordington who left about two thousand pounds a year for its endowment, for maintaining professors and scholars, to study and practise divinity, surgery, and physic.

The town of St. Peter's, in Martinico, notwithstanding the fires which have four times reduced it to ashes, still contains about seventeen hundred houses. It is situated on the west coast of the island, on a bay or inlet which is almost circular. One part of it is built on the strand along the sea side, which is called the *Anaforuga*; and is the place destined for ships and warehouses. The other part of the town stands upon a low hill; and is called the *Fort*, from a small fortification that was erected there in 1665, to check a sedition of the inhabitants, but it now serves to protect the road from foreign enemies. These two parts of the town are separated by a rivulet, and the Anchorage is at the back of a pretty high and steep hill. Shut up as it were by this hill, which intercepts the easterly winds, the most constant and most salubrious in these parts, exposed, without any refreshing breezes, to the scorching beams of the sun, reflected from the sea, and the black sand on the beach, this place is excessively hot. Besides there is no harbour; so that the ships which cannot winter safely on the coast are obliged to take shelter at Fort Royal. These disadvantages, however, are compensated by the conveniency of the road of St. Peter's for loading and unloading goods; and by its situation, which is such, that ships may go in and out at all times, and with all winds.

Digitized by Google

COMMERCE, FISHERIES, &c.

THE principal produce of Cuba is cotton; but this commodity, through neglect, is now become so scarce, that sometimes several years pass without any of it being brought into Europe. In lieu of cotton, coffee has been cultivated; but by a similar negligence, that is raised in no great quantity; the whole produce not exceeding thirty or thirty-five thousand weight, one third of which is exported to Vera Cruz, and the rest to Madrid. The cultivation of coffee naturally leads to that of sugar; and this, which is the most valuable production of America, would of itself be sufficient to give Cuba that state of prosperity for which it seems peculiarly designed by nature. The astonishing fertility of its new lands, if properly managed, would enable it to surpass every other nation, however they may have now got the start of it; yet such is the indolence of the Spaniards, that to the present time they have but few plantations, where, with the finest canes, they make but a small quantity of coarse sugar at a great expence. This serves partly for the Mexican market, and partly for the mother country; while the indolent inhabitants are content to import sugar for themselves at the expence of nearly 220,000l. annually. It has been expected with probability that the tobacco exported from Cuba would compensate this loss; for after furnishing Mexico and Peru, there was formerly sufficient, with the little brought from Caracca and Buenos Ayres, to supply all Spain. But even this trade has declined through the negligence of the court of Ma-

Digitized by Google

drid, in not gratifying the general taste for tobacco from the Havannah.

The Spanish colonies have an universal trade in skins; and Cuba supplies annually ten or twelve thousand, and the number might be easily increased in a country abounding with wild cattle, where some gentlemen possess large tracts of ground, which, for want of population, can scarcely be applied to any other purpose than breeding cattle. The hundredth part of the island is not yet cleared; the true plantations being all confined to the beautiful plains of the Havannah.

All the plantations together are supposed to employ about twenty-five thousand male and female slaves: the number of whites, mestees, mulattoes, and free negroes upon the whole island, amounts to about thirty thousand. The food of these different species consists of excellent pork, bad beef, and cassava bread. The colony would be more flourishing, if its productions had not been made the property of a company, whose exclusive privilege operates as a constant and invariable principle of discouragement. If any thing could supply the want of an open trade, and atone for the grievances occasioned by this monopoly at Cuba, it would be the advantage which this island has long enjoyed; in being the rendezvous of almost all the Spanish vessels that sail to the New World. This practice commenced almost with the colony itself. Ponce de Leon, having made an attempt upon Florida in 1512, became acquainted with the new canal of Bahama. It was immediately discovered that this was the best route, the ships bound from Mexico to Europe could possibly take; and to this the wealth of Cuba, is principally, if not altogether, owing.

Digitized by Google

Hispaniola, previously to the late war, was said to have produced as much sugar alone, as all the British West India possessions united, besides immense quantities of cotton, coffee, and indigo. The exports from the French part of the island in 1789, were 47,616,531 lb. white sugar; 96,773,400 lb. brown sugar; 76,885,219 lb. coffee; 7,004,274 lb. cotton; and 758,628 lb. indigo; besides molasses, spirits, tanned hides, &c. to a very considerable amount. The coffee is excellent; each tree in a state of bearing will produce, on an average, a pound weight, and is sometimes equal to that of Mocha. Cotton of an excellent quality grows naturally, and almost without any care, in stony land, and in the crevices of the rocks. The numerous roots of indigo are the only obstacles to the feeble cultivation of the fields, where it grows spontaneously. Tobacco has here a larger leaf than in any other part of America; it grows every where, and sometimes equals that of Cuba, or the Havannah. The kernel of the cocoa nut of St. Domingo is more acidulated than that of the cocoa nut of Caracca, to which it is not inferior; and experience proves, that chocolate made of the two cocoas has a more delicate flavour than that made of the cocoa of Caracca alone.

The commerce of Jamaica is very considerable, not only with all parts of Great Britain and Ireland, but also with Africa, America, the West India islands, and the Spanish main. The ships annually employed are upwards of five hundred sail. Their exports consist of sugar, rum, coffee, cinnamon, ginger, pepper, cotton, mahogany, logwood, pimento, hides, and sarsaparilla; of which the two first are the chief commodities. The total exports for the year 1787, amounted to 2,136,442l. 17s. 3d.

Digitized by Google

The population in the same year was estimated at three hundred and four thousand individuals, viz. thirty thousand whites, ten thousand free negroes, fourteen thousand maroons, and two hundred and fifty thousand slaves.

Barbadoes formerly employed four hundred sail of ships in trade, and the annual exports in sugar, indigo, ginger, cotton, and rum were amounted to 850,000*l*. But of late years this island has declined very much in its commercial importance, which may be attributed partly to the growth of the French sugar colonies, and partly to their own establishment in the neighbouring isles. Their commerce consists of the same articles as formerly, though they deal in them to less extent.

The inhabitants of Barbadoes are reduced to three classes, viz. the masters, the white servants, and the blacks. The former consist principally of English, Scots, or Irish, but the great encouragement given by government to peopling this and other West India Islands, has induced some Dutch, French, and Portuguese to settle among them with their estates, by which, after a certain time, they acquire the rights of naturalization in Great Britain. The white servants, whether by covenant or purchase, lead more easy lives than day-labourers in England. The manners of the white inhabitants, in general, are the same as in most polite towns and countries of Europe.

The annual produce of Guadaloupe and the adjacent islands was estimated, several years ago, at forty-six millions of pounds of sugar, twenty-one millions of coffee, three hundred and twenty thousand pounds of cotton, and eight thousand of cocoa; besides logwood, ginger, rum, skins, &c.

Martinico, shortly after the peace of Utrecht,

Digitized by Google

became the mart for all the windward French settlements, and began to assume a very considerable degree of commercial importance. The annual exports amounted to seven hundred thousand pounds. The connexion of Martinico with the other islands entitled it to profits of commission and charges of transport, which together formed a very considerable sum. The trade with Cape Breton, Canada, and Louisiana, procured a market for sugars, coffee, molasses, and rum, in exchange for salt fish, vegetables, deals, and flour. And the clandestine trade on the coasts of Spanish America, commonly produced a profit of ninety per cent. on the value of a hundred and seventy-five thousand pounds, sent annually to the Caracccas or neighbouring colonies. Upwards of 784,000l. were constantly circulated with great rapidity; and this is, perhaps, the only country in the world where specie has been so considerable as to make it a matter of indifference, whether the inhabitants dealt in gold, silver, or commodities.

This extensive trade brought into the ports of Martinico annually two hundred ships from France, and about a hundred from Guinea, Canada, Marguerita, and Trinidad, besides Dutch and English smuggling vessels. The war of 1744, however, put a sudden stop to this prosperity; and even after peace was restored its trade was almost ruined by the blunders of the French ministry. In 1762 it fell into the hands of the British, but was restored in the following year. For some years, the contraband trade with the Spanish coasts was almost entirely lost. The cession of Canada had precluded all hopes of opening a communication which had only been interrupted by temporary mistakes. The productions of the Grenades, St.

Digitized by Google

Vincent, and Dominica, which were now become British dominions, could no longer be brought into their harbours; and a new regulation of the mother country, which forbad her having any intercourse with Guadaloupe, left no hopes from that quarter. The present exports are sugar, coffee, cocoa, rum, cotton, cassia, and molasses; besides preserved fruits, tobacco, rope-yarn, hides, wood for dyeing, indigo, &c.

It is now proper to give some account of the cod-fishery, for which the coasts of Newfoundland have been long famous, and which is a branch of commerce of prodigious advantage to Great Britain. That part of the sea, where this fishery is chiefly carried on, is about the great bank of Newfoundland, which is a kind of submarine mountain of sand, about a hundred and fifty leagues in length, and in some places fifty in breadth, lying on the east side of that island. To this great bank, and others near the coast, several hundred ships resort annually from various parts both of America and Europe, many of which bring away thirty or thirty-five thousand fish apiece; and, though this yearly consumption has been made for two centuries past, yet the same plenty of fish continues, without any sensible diminution, insomuch that one would think them equal in number to the grains of sand on the banks they frequent.

Here we must take some notice of the vast fecundity of fishes, which is truly wonderful, especially when we consider that these inhabitants of the waters are not only destroyed by man, their common enemy, but are perpetually devouring one another, the smaller being a prey to the greater. But notwithstanding these mutual depredations, and the snares of the fishermen, by which one

Digitized by Google

would think the watery element would in time be depopulated; we see the wise Creator has sufficiently provided for their preservation by giving strength to some, to others activity and circumspection, and by multiplying them to such an astonishing degree, that their fecundity exceeds their natural impatience to devour one another, and those vast numbers that are destroyed are soon recruited by the survivors of the species. Thus cod-fish in particular, though so many ship-loads are every year taken about the great bank of Newfoundland, those remaining of the same tribe are always more than sufficient to furnish us with the same quantity the succeeding season. Almost every one has an opportunity of observing the prodigious number of eggs or spawn in some sorts of fishes; but what can the naked eye discern in comparison of what M. Leewenhoeck discovered by the assistance of his excellent microscopes! This gentleman examining the spawn of a cod-fish, took one of the hairs of his head, which through his glass appeared to be an inch broad, and placing it near the animalcula contained in the spawn, he found that at least sixty of them would lie within its diameter. This being supposed, and their bodies being allowed to be spherical. M. Leewenhoeck computed that 216,000 of them are equal to a globe whose axis does not exceed a single hair's-breadth. M. Petit found 342,144 eggs in the hard roe of a carp eighteen inches long; but M. Leewenhoeck only found 211,629 eggs in one of those fishes. What is most to our purpose, however, the last-mentioned curious enquirer into the secrets of nature tells us, that a cod contains 9,344,000 eggs. Who can help standing amazed at this prodigious fertility, undoubtedly designed

Digitized by Google

by providence to preserve the species from being entirely destroyed by any accidents or enemies whatsoever!

The gulf of St. Lawrence, and the coasts of Nova Scotia, and Cape Breton, as well as those of Newfoundland, abound with these inexhaustible treasures, these rich mines, which are of greater value, and cheaper wrought, than those of Peru and Mexico: for, besides the great profit which particular persons make of this fishery, considering the seamen it breeds, the tradesmen it maintains, and the shipping it requires, the increase of the national stock arising from thence is almost incredible. A ship of a hundred tons, with the charge only of victuals, wages, and fishing-tackle for twenty hands, shall carry to market in Portugal, Spain, or Italy, three thousand pounds worth of fish, by which the proprietors shall gain at least two thousand; so that a hundred and fifty such ships will clear three hundred thousand pounds annually, and consequently so much will the public and private stock be increased.

It is to be observed, that there are two sorts of salt cod, the one called green or white, the other dried or cured; but they are both the same fish, only differently prepared. The best, largest, and fattest cod are those taken on the south side of the great bank; and the best season is from the beginning of February to the end of April, for then the cod, which during the winter had retired to the deepest parts of the sea, return to the bank, and grow very fat. Those caught from March to June keep tolerably well; which cannot be said of those taken in July, August, and September. An experienced fisherman, though he only takes one fish at a time, will catch three hundred and

Digitized by Google

fifty or four hundred in a day, but not often so many; for it is very fatiguing work, both on account of the weightiness of the fish, and the cold that reigns about the bank. When the heads of the fish are cut off, their bellies opened, and the entrails taken out, the salter (on whose ability and care the success of the voyage chiefly depends) ranges them in the bottom of the vessel, and, having made a layer thereof a fathom or two square, he covers it with salt; over this he lays another, and covers it as before; and thus he disposes all the fish of one day, taking care never to mix the fish of different days together. When the cod have thus lain to drain for three or four days, they are moved into another part of the vessel, and salted a second time; and this is all the preparation these green fish undergo.

The principal fishery for cod intended to be dried is along the southern coast of Newfoundland, where there are several commodious ports to carry the fish ashore: and though the fish are smaller here than at the bank, on that account they are the fitter to keep, as the salt penetrates them the better. As cod are only to be dried in the sun, the European vessels are obliged to put to sea in March or April, in order to have the benefit of the summer for drying. Some vessels indeed are sent in June and July, but those only purchase fish already prepared by the English settled in Newfoundland, giving them meal, brandy, biscuit, pulse, linen, &c. in exchange.—When the ships arrive in the spring, and have fixed upon a station, some of the crew build a stage or scaffold on shore, whilst the rest are a fishing, and as fast as they catch their fish they land them, open them, and salt them, on moveable benches; but the principal salting is

Digitized by Google

performed on the scaffold. As soon as the fish have taken salt they wash them, and then lay them in piles to drain. When drained, they range them on hurdles, head to tail, and whilst they lie thus they turn them four times every four and twenty hours. As they begin to dry, they lay them in heaps, of ten or twelve each; and continue to enlarge the heaps every day, till they are double their first bulk. At length they join two of these heaps together, and turn them every day, as before. Lastly, they salt them over again, beginning with those that have been salted first, and then lay them in huge piles as big as hay-stacks. Thus they remain, till they are carried on board, where they are laid on branches of trees, disposed for that purpose at the bottom of the vessel, with mats all round, to prevent their contracting any moisture.—Besides the fish itself there are other commodities obtained from it, viz. the tripes and tongues, which are salted at the same time with the fish, and put up in barrels; the roes or eggs, which, being salted and barrelled up, are of use to cast into the sea to draw fish together, particularly pilchards; and the oil, which is drawn from the livers, and used in dressing of leather.

Digitized by Google

NEW DISCOVERIES.

CHAP. I.

OF THE OTAHEITEAN ISLANDS.

Historical Account of the Discovery.

NEAR fifteen centuries elapsed before the existence of the western continent was known to the inhabitants of the eastern; but the exertions of the great Columbus, and the advantages resulting from his discoveries, stimulated others to imitate his example; and that quarter and its appendages were more fully explored.

Amid these discoveries, however, which were carried on with considerable ardour, the islands of Otaheitee remained concealed in their insulated dwelling for about two centuries longer. Some indeed have imagined, that this part of the world was visited in the year 1606; but this opinion mingles with those of dubious evidence.

Declining, therefore, to enter the regions of conjecture, we proceed to observe, that Otaheitee and its adjacent isles were discovered in 1767, by Captain Wallis, who had received a commission from his Britannic majesty to sail with the Dolphin, the Swallow, and Prince Frederick, in quest of new regions. After the necessary preparations, Captain Wallis commenced his voyage; and, having visited different islands, and endured a variety

Digitized by Google

of hardships, he at length arrived off Otaheitee, on the 18th of June, 1767.

On the morning of that day, discovering land at the distance of four or five leagues, and sailing towards it, he deemed it prudent to cast anchor in consequence of a thick fog. When the fog dispersed, he was much surprised to find his ship surrounded with a number of canoes full of people, who seemed overwhelmed with astonishment; and, with the most violent emotions, conversed together concerning the uncommon object before them. Some trifles were shown them, and signs were made to come on board. After a general consultation among themselves, they came round the ship, with apparent signs of friendship; and one delivered an oration, holding a branch of a plantain-tree in his hand, which, at the conclusion, he threw into the sea. Then a young native, more courageous than his companions, ventured on board. The captain offered him some presents, but he declined accepting them until the canoes, coming along-side, threw into the ship some branches of the plantain-tree. Some ventured on board, but none by the proper ascent. Wandering upon deck, and gazing on the surrounding wonders, a goat belonging to the ship ran against one of them, who instantly leaped over the ship's side, and was followed by all his companions. When their terror had subsided, however, they returned to the ship; and some sheep, hogs, and poultry being shown them, they intimated that they were acquainted with the two latter. The Captain gave them some nails and other trifles, and signified that he wanted hogs, fruits, and fowls; but they did not appear to understand his request. In this first interview, they were detected of several at-

Digitized by Google

tempts to pilfer; and one of them in particular snatched a laced hat from one of the officers, and, jumped over-board with it.

The captain having sent the boats to sound a bay which promised safe anchorage, the canoes surrounded them: and perceiving that their designs were hostile, he made a signal for them to return, and in the mean time fired a gun over their heads. The report at first alarmed them, but they attempted to prevent the return of the boats. With great reluctance the English were constrained to fire a musket, which, wounding the man who made the first attack, constrained the rest to flee, with the utmost precipitation. Upon the return of the boats, the ship hastened to depart; but a large canoe was seen making towards it with great speed. The captain resolved to wait her arrival, on which, one of them, addressing the English in a formal oration, threw a branch of a plantain-tree on board, as the signal of peace, which signal was returned from the ship. To ratify the bond of proffered friendship, some small presents were given, with which they appeared highly satisfied, and so departed.

The Dolphin now set sail, and found herself next morning off a neck of land, crowded with natives. She anchored, and was quickly visited by some canoes, bringing fruit, fowls, and hogs; which were quickly bartered for a few nails and small toys.

The boats were again sent to sound along the shore for a safe anchorage, and were anew attacked by three large double canoes. The crew being constrained to defend themselves, they fired, and killed one and wounded another: both dropped into the sea, and their companions instantly dived, and, bringing them up, placed them in the canoe.

Digitized by Google

The boats pursued their course, and some of the canoes went to the shore, while others went to renew their traffic with the Dolphin. During the time that the boats were sounding, the natives in a friendly manner swam to them, bringing water and fruits. In order to obtain water, the boats proceeded to the shore with some small casks, two of which the natives filled, and stole all the rest. When the boats left the shore, it was covered with thousands of men, women, and children. A few canoes continued to hover about the ship, but on account of their pilfering disposition, the Captain would not permit them to come on board.

On the 22d, the natives brought hogs, poultry, and fruits, which they exchanged for knives and other articles. The boats were again sent for water, when the inhabitants, and especially the females, used every possible inducement for them to land. Having procured a small quantity of water, they repaired to the ship, upon which the women pelted them with stones, and showed every mark of indignation and contempt, because they refused their invitation.

On the day following, it was intended to anchor off the place where water was found; but discovering a bay a few miles to the leeward, the ship made towards the same. When she had almost reached the place, however, she suddenly struck against a coral rock, in which situation she remained near a whole hour, when she was relieved by a breeze off the shore. During this imminent danger, she was surrounded by hundreds of the natives in their canoes; but none offered the least violence. The vessel was then piloted round a reef, and safely moored in the bay. In the mean time, some provisions were brought;

Digitized by Google

but the shore being crowded with canoes full of armed men, Captain Wallis loaded his guns, supplied his boats with musketeers, and kept a number of men under arms.

The Dolphin sailed up the harbour on the 24th, and many canoes followed with provisions, which were bartered for knives, nails, and other articles. But in the evening of the same day, a great number of large canoes full of stones arrived; upon which the Captain gave orders, carefully to watch their motions. Some boats also approached, with several women, who practised several alluring arts to entice the sailors. In the mean time the large canoes surrounded the ship, some playing on a kind of flute, others singing, and the rest blowing a sort of shells. Then a very large canoe advanced, in which was an awning, and on the top sat one, holding in his hand some red and yellow feathers.

The Captain having consented to his coming along-side, he delivered the feathers; and, during the time that a present was preparing for him, he put back from the ship and threw the branch of a cocoa-tree in the air. This being the signal of attack, all the canoes shouted, and, hastening towards the ship, poured stones upon her from every quarter. Hereupon two guns full of small shot were fired, and the musquetry was directed among the thickest of the enemy; who at first seemed disconcerted, but soon renewed their attack. Thousands of the natives on shore were now seen hastening to the support of their countrymen; on which orders were given for firing the cannon, some of which were pointed to the place of embarkation. This for a little time sus-

Digitized by Google

pended the hostilities of the natives; but suddenly the scattered canoes re-assembled, and, having hoisted white streamers, they threw stones from slings about two pounds weight, and wounded several of the seamen. Then several canoes approached the bow of the ship, from whence no shot had as yet proceeded; but a gun being levelled at a canoe in which the leader of the rest appeared to be, and having split it in two pieces, the skirmish terminated; the canoes fled with the utmost precipitation, and the people on shore hid themselves behind the hills, as if sensible of the dreadful effects of the artillery.

This contest being ended, the captain sailed towards the intended anchoring place, and moored his ship at a little distance from a fine river. Next morning, a reconnoitering party informed their companions, that they had found good water, and that not a single canoe was to be seen. Some boats were then sent well manned and armed, with a number of marines, with orders to land the men under cover of the ship and boats. This being effected, Mr. Furneaux, the leader in this attempt, hoisted a broad pendant upon a staff, and took possession of the island in the name of his Britannic Majesty, calling it King George the Third's island; but the original name of *Otaheitée* is now more generally used. This ceremony of taking possession was practised by all the new discoverers among the Spaniards, and was also adopted by the English

During this ceremony, two old men were seen on the opposite side of the river in a suppliant posture, and apparently much terrified. The English made signs for them to cross the river; in consequence of which one swam over and ap-

Digitized by Google

proached the lieutenant, crawling on his hands and feet. The officer endeavoured to convince him that no injury should be done to his countrymen unless they were the aggressors. He then showed some hatchets, which he intimated would be exchanged for provisions. Some presents were also given to the venerable native, who expressed his gratitude by dancing round the staff; but when he saw the pendant shaken by the wind, he ran backward with evident signs of consternation and fear. When he had recovered from his fright, two hogs were brought, and laid down before the English. The hogs were put into a canoe, which the old man rowed towards the ship with uncommon agility; and on his approach, he delivered a grave oration, and distributed a number of plantain leaves; after which he rowed back, refusing to accept any present.

During the night, drums and other instruments of music were heard on the land; and the returning morning displayed the shore abandoned by the natives, and the pendant taken away.

While the lieutenant and his men were on shore performing the above-ceremony, and in quest of water, the captain from the ship observed many of the natives creeping behind bushes towards the watering place, a large party advancing through a wood, and another party descending from the top of a hill, whilst two divisions of canoes were hastening towards the same side of the bay. The lieutenant, apprised of his danger, hastened on board, and sent the old man to inform his countrymen, that he only wanted water; but instead of this being granted, the islanders seized the casks, and the signs of hostilities every where appeared. The canoes

Digitized by Google

drawing near that part of the bay where the ship lay at anchor, received many from the shore laden with bags of stones. Thus prepared for attack, they rowed with full speed towards the vessel; but the captain having ordered his men to fire upon the first party that approached, they instantly fled in great consternation and disorder. Resolved to terminate all disputes by overawing the natives, the captain commanded to fire into the wood, and afterwards towards the hill, whither the natives had fled. Experiencing how far the guns could reach, they instantly dispersed.

The captain next sent the boat under a strong guard with the carpenters, to destroy all the canoes which they could find. Feeling their inferiority, and dreading the displeasure of the English, a small party of the natives came to the beach, stuck up some branches of trees as the signs of reconciliation, retreated into the wood, and then returned with hogs and dogs, which they left on the shore with their legs tied, and a piece of the cloth which they wore, making signs for the sailors to accept of them. A boat was sent, which conveyed the hogs, but left the other articles, and placed in their stead nails and hatchets; but the natives would not accept of them until the cloth was taken away.

Peace being established, the sick were sent on shore, and lodged in tents under the care of the surgeon. This gentleman shooting a wild duck, it dropped on the opposite side of the river, in the presence of the natives, who instantly fled with fear; but after some time they were prevailed upon to bring the duck over the river, which they laid at the surgeon's feet, with evident emotions of fear. A second shot killed

Digitized by Google

three ducks, and the natives were now possessed with such an idea of the effects of fire-arms, that while it raised their astonishment, served to ensure their good behaviour.

The gunner was now appointed to manage all affairs of traffic between the English and the natives, which proved a wise arrangement; for the sight of a gun made restitution of whatever the natives pilfered. The old man was also very beneficial in negociations with the natives. By his means, a hatchet which was stolen was not only restored, but the offender delivered up to the captain, who declined punishing him, and set him at liberty. Restored to his companions, they displayed the existence of fraternal affection in their minds, by conducting him to the wood amid shouts of rejoicing. This gave an opportunity for the display of gratitude in the Otaheitean character; for that man brought a roasted hog, and some bread-fruit to the gunner the next day, as an acknowledgment for the lenity shown him.

At this time, the captain, the first lieutenant, and the purser were all ill; so that the chief care devolved upon Mr. Furneaux, the second lieutenant, who, with equal address and fidelity, carried on the traffic with the natives; and provisions were procured in such plenty, that almost every man's health was restored in the space of fourteen days. Upon the restoration of the captain's health, he went to survey the island, which he found extremely pleasant, fertile, and populous.

A few days after, Captain Wallis received a visit from Oberea the queen of the island, whose behaviour showed her a woman of strong sense, superior rank, and keen sensibility. After receiving

Digitized by Google

some presents from the captain, she intimated her desire to see him at her house the next day, to which he consented, and was received in a princely manner. She met him, attended with a great retinue, some of whom were commanded to carry the captain, and the rest who had been sickly, not only over the river, but also to her house; and the procession closed with a strong guard of marines and seamen. The natives crowded to see them as they advanced; but Oberea waving with her hand to them, they all made way for the procession to pass on. Approaching her dwelling, many persons came forth to meet them, whom she caused to kiss the captain's hand, signifying, that they were her relations. Her house was three hundred and twenty feet long, and forty broad; the roof covered with leaves of palm-trees, and supported by three rows of pillars, one in the centre, and one on each side.

The gentlemen being seated, Oberea displayed her hospitality, by aiding some of her female attendants to pull off their coats, stockings and shoes, and smoothed down the skin of their legs, which she rubbed lightly with her hands above the space of half an hour. The surgeon, being heated with walking, pulled off his wig; at which one of the natives screamed out, and the eyes of the whole company were instantly fixed on a sight equally unusual and surprising.

The queen now ordered some bales of Otaheitean cloth to be introduced, with which she clothed the captain and his attendants. Having entertained them with princely elegance, according to the custom of the country, and after making them some presents, and receiving others in re-

Digitized by Google

turn, she sent them away in the most friendly manner. Several visits were exchanged, and the queen behaved in the most affectionate manner; and when informed of their departure, she manifested the keenest sorrow. In the whole of her character and behaviour, she appeared capable of receiving the highest improvement, and in many respects was not far inferior to an European lady; although it must be granted, that she was strongly tinctured with the disposition too prevalent among the females of that beautiful island.

Otaheitee was again, in 1768, visited by M. De Bougainville, who was kindly received by the chief of that part where he moored. There is strong evidence to prove, that the deadly disease, which has almost depopulated that island, was introduced by the French sailors in this ship. The existence of this disease is so extensive, that it threatens to desolate that beautiful island, unless the spread thereof be prevented by the influence of the gospel, and the effects removed by the power of medicine.

The famous Captain Cook was the next who visited this island. On his arrival, he was received with the usual tokens of peace, and commerce was immediately established between the natives and his men. The old man who had been so serviceable to Captain Wallis came on board, and showed his former ingenuity and affection. By the wisdom of the captain, certain rules were established, for the conducting of commerce during his abode at the island, and severe penalties were annexed to the violation of the same.

When Captain Cook went on shore, he was

every where received with the tokens of friendship and peace. Being conducted by a circuit of four miles through groves of bread fruit and cocoa-trees, intermingled with the dwellings of the natives, he saw few fowls or hogs. Those of the crew, who had been formerly at Otaheitee in the Dolphin, were of opinion, that the queen's dwelling was removed, as there were no traces of it to be found.

Several of those of superior rank visited the captain and those gentlemen who accompanied him, and reciprocal presents and kind offices were interchanged. Invited to their dwelling, the captain went along with Mr. Banks and Dr. Solander, who found the natives possessing similar dispositions, and practising similar actions, to what Captain Wallis had previously discovered.

Having given this brief account of the original discovery of Otaheitee, we must now hasten to notice some of the adjacent islands discovered by Captain Cook. He first sounded at the north-west part of Huaheine, but found no bottom at seventy fathoms deep. A few of the natives approached with their canoes;—the sight of one of the natives of Otaheitee dismissed their fears, and the king and queen of the island came on board. The sight of every thing in the ship filled them with surprise; but unlike the people of Otaheitee, they neither requested presents nor sought to pilfer.

Oree, the king, becoming familiar with Captain Cook proposed, in token of friendship, to exchange names, which was readily granted. Anchored in a convenient place, Mr. Banks and some other gentlemen, accompanied by the king, went on shore. The moment that they were

landed, Tupia, the native of Otaheitee, uncovered himself as low as the middle and desired Mr. Monkhouse, one of the gentlemen, to imitate his example; and being seated opposite to the king, he uttered a speech or prayer about twenty minutes long, his majesty answering by regular responses. During this ceremony, Tupia delivered at different times a handkerchief, a black silk neckcloth, some plantains and beads, as a present to the deity of that island; and in return, the English received a hog, some young plantains, and two bunches of feathers,—all of which it was needful religiously to take on board. Such was the ceremony of ratifying peace between the English and the king of the island.

The human mind in its rudest state perceives, that the existence of friendship implies reciprocal good offices, and gross superstition supposes that similar expressions of friendship ought to subsist between the gods of different countries. But when the Gospel visits the mind covered with darkness it will dispel these irrational ideas, and teach, that one Great Lord ruleth over all, and that by his command, and by the circumstances in which all men are placed, they ought to love one another, and live together in bonds of the strictest amity.

Upon an excursion into the island, its productions appeared similar to those of Otaheitee. The rocks and clay, however, seemed more scorched, and the boats and houses were curious and remarkably large. The level part of the country affords the most beautiful landscapes which the imagination can form. The soil is exceedingly fertile, and the whole shore lined with fruit-trees of different kinds, particularly the

Digitized by Google

cocoa-nut. In some places, however, there are salt swamps, which produce neither trees nor plants.

But the mind of the stranger is not merely gratified with the sight of natural curiosities, he also derives pleasure and information from the remarkable productions of art. On this island, Mr. Banks saw a kind of chest or ark, the lid neatly sewed on, and thatched in a peculiar manner with palm nut leaves. It was placed on two poles, and supported by two small carved arches of wood, these poles were used to remove it from place to place, in the manner of a sedan-chair. The resemblance between this and the ark of the God of Israel was truly striking; and what encreased the astonishment was, that upon enquiry, he found it was called THE HOUSE OF GOD. It is, however, much to be regretted, that no farther information could be obtained concerning this extraordinary fact.

Commerce went on slowly, but a few articles were exchanged for the produce of the country. When about to leave this place, the ship was visited by the king; to whom the captain presented a pewter plate, with the following inscription—"His Britannic Majesty's ship Endeavour, Captain Cook, commander, 16th of July, 1769,"—and other medals and trifles, which he engaged to keep in remembrance of the English having visited his island.

Huaheine lies in 16 degrees of south latitude, and 150 of west longitude. Its distance from Otaheitee is about thirty leagues, and the circumference about twenty miles. The fruits of the earth ripening a month sooner than at Otaheitee, prove that the climate is warmer, and the soil more fer-

Digitized by Google

tile. The inhabitants are taller and stronger than those of Otaheitee, and the women are both fair and handsome. In their general character, they seemed less timid, curious, and avaricious than the inhabitants of Otaheitee, but they were less active and industrious. Upon the firing of a gun, they did not fall down, like the Otaheiteans; but it must be granted, that they did not experience its deadly effects, as their neighbours had done.

The captain next directed his course towards the island of Uietea, which is about seven or eight leagues distant from Huaheine. Conducted by Tupia from Otaheitee, he anchored in a bay, formed by a reef, on the north side of the island. Two canoes, in which were some of the natives, approached the ship, bringing two hogs, which were exchanged for some nails and beads. The Captain, Mr. Banks, and several other gentlemen, went on shore along with Tupia, who introduced them, with the same ceremony of friendship that had taken place at Huaheine. This ceremony being ended, Captain Cook took possession of this, and the three neighbouring islands, in the name of his Britannic Majesty. In this tour, they visited a large morai, or burying-place, where the monuments of departed valour and excellence were different from those of Otaheitee. These were composed of four walls built of coral stones, and about eight or nine feet high, and encircling a court about thirty feet square. At a small distance, they found an altar, whereon was extended the last sacrifice, which was a hog about eighty pounds weight. It is a singular fact, that this hog appeared to be one of the best in the country, and, being roasted, was offered entire. Here also,

Digitized by Google

the English strangers saw four of the arks, or Houses of God, which were found at Huaheine. To hazard conjectures concerning the origin of this people from these facts, might be dangerous; but they certainly lay a foundation for judicious missionaries to introduce into their minds some important truths of revelation.

The bay where the Endeavour anchored is called Oopoa, and is both spacious and secure. The situation is off the eastern opening, in the channel that leads into the harbour, and may be discovered by a small woody island, lying to the south-east, called Oatara. To the north-west, there are also two small isles, called Opururu and Tamon, between which Captain Cook entered the harbour.

The next adventure was to go in quest of Otaha, of which Captain Cook had already taken possession in the name of His Britannic Majesty. On the twenty-fifth, he arrived off that place, and Dr. Solander and Mr. Banks went in the long boat, accompanied with the master, in order to sound for a safe harbour. On the other side of the island, they found a harbour both safe and convenient. Going a-shore, they purchased some of the productions of this island, which wese similar to those of the others; but, in general, this assumed a more barren aspect. There these strangers were received with the respect which the natives were accustomed to give to their own kings; and the general character of the people was highly pleasing.

Leaving that island, Cook sailed towards Bolabola. The place where he approached was inaccessible; the ship, therefore, hovering about for some days, anchored in one of the harbours off Ulietea. Conferring the general name of Society

Digitized by Google

Islands to those different islands which lie in that group, the captain proceeded southward in quest of another island, which Tupia informed him was about a hundred leagues distant.

The captain reached this island, which was called Obiterea; and standing in for the land, beheld several of the natives coming along the shore. A lieutenant, Dr. Solander, Mr. Banks, and Tupia, were sent to sound for a safe anchorage, and to obtain intelligence of the natives respecting any islands which might lie to the southward. Approaching the shore, they observed the natives armed with long lances, and a multitude were drawn up upon the beach; and two, jumping into the water, endeavoured to gain the boat; but the boat's crew did not deem it prudent to wait their arrival. Doubling the point where they intended to land, they discovered a spacious bay, but found another party of the natives armed in a manner similar to those whom they had seen before. When preparing to land, Tupia was desired to inform them, that the English intended no violence, but only to traffic with them for nails and other articles, some of which were produced. Hereupon, some of them came along-side of the boat, and, receiving some nails, went away seemingly well pleased; but suddenly returning, several boarded her, and attempted to draw her on shore; upon which, some muskets being fired over their heads, they all jumped into the sea. The boat pursued the fugitives, but the surf being exceedingly strong, landing was found impracticable.

Soon after the canoe of the natives had reached the shore, a man was seen brandishing a weapon opposite to the boat, and crying with a shrill voice, which Tupia informed the English was the signal

Digitized by Google

of defiance. Disappointed in finding a proper landing place, they returned to attempt it where the canoe landed; but here again a man of a more formidable appearance was seen brandishing the weapon of defiance. When this champion retired, a grave old man approached, and asked Tupia several questions concerning the vessels, such as who were the persons on board? from whence they had come? whither they were bound? and what were their intentions in approaching this island? It was then proposed, that the people on board should go on shore, and trade with them, if they would lay aside their weapons. To this the natives would not agree, unless the English should also lay aside their weapons, but this was deemed too hazardous, in consequence of the superior number of the natives, and also their fidelity being unknown. For these reasons, therefore, and because there was no safe anchorage for the Endeavour, she left that island, and sailed to the southward.

The natives of this island are tall, well proportioned, strong, and courageous. Similar to the inhabitants of the Friendly Islands, they have long hair, and their bodies are tatowed in different parts. The island does not rise in high peaks, but is level and uniform, divided into small hillocks, some of which are covered with groves of trees: but none of the trees bearing bread fruit, and very few of those who bear cocoa, were seen on the sea coast. The quality of their cloth, and the manner of their dress, differed from the other islanders. Their garments were dyed yellow, and, on the outside, painted with a variety of colours. The habit was one whole piece with a hole, through which they put their head; this robe reached down to their

knees, and was bound around their waist with a yellow sash. Some of them wore caps of the same nature, and some a piece of cloth bound round their heads, resembling a turban.

Tethuroa, which also belongs to this group, is about eight leagues distant from Point Venus, and in circumference about ten leagues, including a number of islets, which are thinly inhabited, but frequently resorted to by wandering tribes. Being subject to the chief of Otaheitee, he allows no bread-fruit trees to grow there, that the inhabitants may bring their fish in exchange for the bread-fruit of Otaheitee. Maitea is also represented as connected with this insulated society. It is situated in 17 degrees south latitude, and in 148 west longitude. This island lies east of Otaheitee, is considerably elevated, and on the east enclosed by a coral reef. It is about three miles in circumference, and the north part too steep for habitations to be erected thereon. It is tolerably populous, but the inhabitants are more barbarous than those of Otaheitee.

Captain Cook visited an island, called Eimeo, about four leagues distant from Otaheitee. In this territory, there are many spacious valleys, and in several parts of its coasts, land-locked harbours. The hills rise suddenly from the sea, but some of these are very fertile. The natives are tinctured with the same avaricious disposition as those of Otaheitee, but greatly inferior in beauty. Captain Wallis called this island The Duke of York's Island, but it is generally distinguished by the name of Eimeo.

Captain Wallis discovered another island, and called it Sir Charles Saunders' Island; but the original name is Tapooamanoo. This island is situated in 17 degrees south latitude, and in 150 west

Digitized by Google

longitude; being about six miles in extent from east to west. The centre rises in a high mountain with a double peak, but is generally fertile, and the skirts abound with cocoa-nut trees. The dwellings of the natives are small, and their number few. It is doubtful whether or not any Europeans visited the interior of this island.

To the east of Otaheitee, are scattered many other islands, well inhabited; but the navigation is so intricate, that they have received the name of the Labyrinth, and the Dangerous Archipelago. The inhabitants appear to be of the same race with the natives of the other islands, but darker in their complexion, and more ferocious in their manners.

Besides those who have been seen by Europeans, the natives of Otaheitee narrate, that there are many other islands encircling theirs, which are elevated, fertile, and very extensive. These appear to have been peopled from those already mentioned, either by persons more adventurous than their neighbours, going in their canoes in quest of new settlements, or by some being driven away by the force of the tempest, and so accidentally landed on an unknown island. Many circumstances support the validity of this conjecture. A similarity of complexion, stature, manners, language, and customs, obtain among them all: nor is it likely that any of the canoes ever seen in use among them could have endured the fatigue of reaching from a very distant shore.

Tongataboo is said to have been discovered on the 27th of January, 1643, by a Dutch navigator named Tasman. Upon his arrival, the natives were peaceable and unsuspicious;—they came on board the vessel, cheerfully exchanged hogs, fowls and fruits for European trifles; and, except

Digitized by Google

their national crime of pilfering, they behaved in a very friendly manner. Tasman anchored in the bay off this island, and sent his boats in quest of fresh water. An elderly chief repeatedly came on board, and showed the most profound respect to his visitors, receiving with peculiar cordiality the presents which were given him. A wooden bowl, presented to him on this occasion, was long preserved as a diving-cup, to convict persons accused of enormous crimes; and what is very singular, the same homage which was paid to the chief when present, was paid to the cup in his absence.

The pacific deportment of the natives on the arrival of Tasman, and no weapons being seen by him in that island, fully ascertains the peaceable and secure manner in which the inhabitants of this island live. During the stay of the Dutch mariners in that island, no quarrel occurred; and having been plentifully supplied with water, they departed from it, in order to explore those which lay to the northward.

This place was afterwards visited by Captain Cook, in the year 1773. Having been previously at a neighbouring island, called Eooa, he was accompanied by fourteen or fifteen sail of the vessels of that island. The king of the place was in one of these, and his canoe was only distinguished from the rest by a small bundle of grass, fastened to the end of a pole, and fixed in the stern.

Scarcely had the captain cast anchor, when some of the natives of Tongataboo hastened in their canoes to show him a place of more convenient anchorage. During the time that the ship was plying up the harbour, the king frequently sailed

Digitized by Google

round her in his canoe, with evident signs of joy; and among those who came on board at this time, was one Otago, who had been very useful to Captain Cook when he formerly visited that part of the globe.

The place where the Resolution anchored was about ten fathoms of water, formed by the shore of Tongataboo, on the south-east, and by two small isles on the east and north-east, a quarter of a mile distant from the shore. Scarcely had the ship rested in the harbour, when multitudes of the natives crowded to welcome the English with the strongest demonstrations of joy; and during the whole time that the Resolution remained there, no quarrel ensued, nor was there any necessity for punishment in consequence of improper conduct. The natives seemed to pass their time in a kind of luxuriant indolence, all labouring a little, but none to excess: the king himself occasionally works his canoe, although he must have one to help him to his food.

The captain, attended by Omai, a native who went along with them, with some of the officers and gentlemen, landed on the island of Tongataboo, where they were received by the king of the place, and conducted to a small neat house near the woods with an extensive area in front, which had been set apart for the captain's residence during his stay on the island. Not long after their entering the house, a large circle of the natives assembled, in the area, and preparations were suddenly made for the entertainment of the strangers. The greatest decorum was observed; and although many of the inhabitants had never seen any Europeans before, none of them proved troublesome or impertinent. Previously to his quitting the land,

Digitized by Google

the captain went in search of water, and was conducted to some ponds, in one of which the water was tolerably good, but at a considerable distance from the shore. He went over, therefore, to the adjacent island, and found better water than had yet been discovered.

A hut was erected near the house given by the king, and the horses, cattle, and sheep were landed, with a party of marines to guard them. The observatory was also set up. Mr. King took up his residence on the shore to direct the observations. A party was stationed to cut wood for fuel and planks for the ships, and the gunners were appointed to carry on commerce with the natives, who flocked from all parts with such things as the island produced.

To the westward of the tent, the country for the space of two miles was entirely uncultivated, but covered with trees and bushes growing spontaneously with the greatest vigour. Beyond this, is an extensive plain, adorned with some small plantations and cocoa-trees. Near the creek, which runs west of the place where the tent stood, the land is perfectly flat, and overflows with the tide.

Here was seen a work of art, which displays no small portion of ingenuity and perseverance in the natives. On one side is a narrow causeway which gradually increases in breadth, and rises with a gentle ascent to the height of ten feet, and there the breadth is ten paces. Adjacent to this is a kind of circus raised above the causeway some feet, and is in diameter about thirty paces, having some trees planted in the centre. On the opposite side is another causeway, which is partly in ruins, and not above forty paces in length. The whole is

Digitized by Google

built of large coral stones, with earth on the surface, overgrown with shrubs and low trees. Whatever might be its original use, it appears now to be totally useless, and several marks of decay show its antiquity. All that could be learned of the natives concerning this singular appearance of art in a rude country, was, that it belonged to Paulaho one of the chiefs, and was called Etchee.

Eooa lies south-east of Tongataboo, at the distance of about four leagues. Tasman discovered this island, but did not land there; and Captain Cook appears to have been the only navigator who landed on this island. He places the eastern extremity in 174 degrees west longitude, and its southern extremity in 21 latitude. The circumference is about ten leagues: and it rises to an elevation above any of the other islands in that quarter. The other isles in this cluster are generally level, but here the land, rising gently, presents an extensive prospect, where groves, in beautiful disorder, are interspersed at irregular distances. The shore is shaded with a variety of trees, among which are the habitations of the natives. On the south-east coast rise the towering hills, but that on the north-west is filled with valleys, meadows, and plains of considerable extent; which, being adorned with clusters of trees, and small plantations, exhibit the most luxuriant prospect. While Captain Cook was beholding this enchanting prospect, his mind was elated with the future prospect of these fields and meadows being stocked with English cattle grazing upon them. The soil upon the high grounds is composed of a soft sandy stone; but in the low grounds, of a deep reddish clay. On the most elevated part of the island was a round platform, supported by

Digitized by Google

a wall of coral rock, which was erected by the chief, and thither the principal people of the island sometimes resorted to drink kava. At a small distance, was a spring of excellent water. The best anchorage was found upon the north-west side, in a gravelly bank extending two miles, with twenty or thirty fathoms of water. There is also a creek which affords convenient landing for boats at all times of the tide. This island is superior to Tongataboo, on account of the pleasantness of its situation, and the quality of the water, and there is little doubt but the climate would be found very agreeable to an European constitution.

The manner in which those who actually visited this island along with Captain Cook express themselves, will afford the reader the most accurate idea of that place. Speaking of the dangers they underwent in reaching that harbour, in their passage from Eooa, they say,—'We had now been sixty days on a passage, which, in a direct course, would not have exceeded ten, and had been exposed to severe trials, owing to some fatality in pursuing a track, of which every seaman on board disapproved. How it happened is not easily accounted for, as it was next to a miracle that any creature on board the Resolution remained alive to reach our present harbour. Had not the copious rains, that fell almost incessantly from the time that we passed the tropic till our arrival here, supplied us with a daily consumption of water, not only the animals, but the men must have perished.

'Happy we were now, however, in finding ourselves on a friendly coast. We forgot the dangers we had escaped, and thought only of enjoying, with inexpressible pleasure, the sweets of

Digitized by Google

these happy islands, whose spontaneous productions perfume the air, to a considerable distance, with a fragrance inconceivably reviving, and whose plantations exhibit a richness of prospect, as we approach them, owing to the beautiful intermixture of the various blossoms with the vivid green leaves of the trees—of which the most animated description can afford but a faint idea.

'Add to these, the tufted clumps which adorn the little rising hills, that appear every where interspersed delightfully among the verdant lawns, and rich, low, surrounding valleys. Nothing in nature can be more pleasing to the eye, or more grateful to the sense. We were no sooner moored in the harbour, than we were encircled with innumerable little boats or canoes, most curiously constructed and ornamented, the sides polished so as to surpass the blackest ebony, and the decks inlaid with mother-of-pearl and tortoise-shell, equal to the best cabinets of European manufacture, in which work these islanders seem to excel.'

This luxuriant island is situated in the latitude of 20, and in the longitude of 147 degrees, and at the distance of eighteen leagues from Tongataboo. It is of a triangular form, and none of its sides extend above four miles. The area is also greatly lessened by a large salt lagoon, which cuts off its south-eastern angle. Small islets, sand banks, and reefs surround the whole coast. A harbour is formed by these on the south-western side of the island with anchorage in ten or twelve fathoms, with a bottom of coral sand. It is well sheltered, but there is a difficulty of obtaining fresh water.

The island which next merits attention is called Hapaee. When Captain Cook approached this

Digitized by Google

island, it appeared to form three islands; and a fourth suddenly presented itself. Each of them appeared to be similar in aspect and elevation, and six or seven miles in length. Their names are Huamo, Foa, Lefooga, and Hoolaiva; but they are all included in the general appellation of Hapaee. Anchorage was found abreast of a reef joining Lefooga to Foa, of twenty four fathoms depth, about a quarter of a mile from the shore, and good landing at all times for the boats.

Scarcely had the captain moored his vessel, when he was encircled with the natives and their canoes, loaded with all the commodities the country afforded, which were exchanged for European trifles.

Shortly after landing the captain was introduced to the king, who, having asked some questions, caused the stranger to sit down by his side, and exhorted his subjects to consider Captain Cook as a friend, who meant only to remain a few days among them; that, therefore, during his stay in the island, they should be careful not to pilfer any thing from him, nor give him the least offence; and that they should bring the produce of the country to be exchanged with his articles of commerce. The ceremony of audience was then terminated by a mutual exchange of presents.

Cook also visited Lefooga, which he found in some respects superior to Annamooka; for the plantations were both more numerous and extensive. Owing to the sandy nature of the soil, various parts are waste and barren; but the interior part of the island is fertile, and the signs of population and improved culture are every where conspicuous. Many of the plantations are so arranged, that their fences run parallel from spacious

Digitized by Google

public roads. Some large spots were seen covered with the paper mulberry-trees, and in general, the plantations were stored with all the variety which the island affords.

Besides these which have been mentioned, there are many other islands in this group, known by the common name of the *Friendly Islands*; some of these not much inferior in extent and population, and others less extensive and populous: but without being more minute, we shall proceed to give a general account of the group called the *Marquesas*, which extend from 8½ to 10½ degrees of latitude, and from 138½ to 140½ degrees of west longitude.

Ohittahoo, one of these, is about nine miles long and seven leagues in circumference. Alvaro Mendana de Neyra is said to have discovered this and the three neighbouring islands, in July, 1595, and called them *Las Marquesas de Mendoca*, in honour of Mendoca, Marquis of Canete, who sent him out. He sent a boat to examine this place, which he named *Santa Christina*, and took possession of it in the name of the King of Spain. Some imprudent, if not cruel, conduct towards the natives, rendered the communication between him and them less friendly; and leaving that, he died in an adjacent island, without accomplishing the object of his voyage.

In the year 1774, Captain Cook went in quest of these islands, in order to ascertain their longitude, and to obtain farther information concerning them. He anchored in the harbour of *Madre de Dios* on the 6th of April. Instantly several canoes hastened from the shore loaded with stones; but finding the stranger peaceable, an advantageous traffic commenced. On this occasion, however,

Digitized by Google

they displayed the same thievish disposition which prevails among most of the inhabitants of the South Sea; and the remembrance of the conduct of the Spaniards, contributed much to increase the jealousy of the natives, and to prevent that comfort which would have been enjoyed by one of the prudence and conduct of Captain Cook.

The inhabited islands which have been discovered are about eight in number. The bays around these afford harbour for shipping, although in some places the access is not pleasant. The natives exceed in beauty those of the other islands; but both sexes are not so cleanly. They use less clothing, and their chiefs are less distinguished from the rest, than those of the adjacent islands. The soil is not so fertile as at Otaheitee, but this tends to render the natives more active and laborious.

Several recorded facts concerning the natives of these islands conspire to prove, that they are naturally of a strong and vigorous intellect, and that the meliorating hand of civilization, and the benign influence of Christianity would render them a brave, active, laborious, and sober race of people: And it is hoped, that the period is not very distant, when the arts and sciences shall unite with the Gospel of our Redeemer, to render them equally flourishing and happy.

To the north lies Ohevahoa, in length six, and in circumference about fifteen or sixteen leagues. Toward the eastern extremity, the surface is steep and craggy; but there are several deep valleys, and the sides of the hills are clothed with verdure and spontaneous trees. Mendana having discovered it on Sunday, he called it *La Dominica*. Because of the inconveniency of harbouring,

Digitized by Google

however, navigators have remained greatly ignorant of its interior situation.

Onateya is also mentioned by Mendana. This island includes an area of three leagues, pleasantly diversified with hills and valleys, shaded by extensive woods, and beautified with pleasant plains.

Mendana also discovered the island of Ohittatoa, which appeared populous, and in circumference about six leagues. The natives came in their canoes, and exchanged the produce of the country; but their pilfering disposition produced some contests with the Spaniards. This island has been coasted by several other navigators, but few of them have landed, or explored the interior.

In this group, Captain Cook mentions another island, called Teeboa, situated in the latitude of nine degrees. The general aspect is not inviting, and its extent is inferior to any of the rest of that neighbourhood.

Captain Brown is also said to have discovered another island, called Nooaheva, the most considerable of all that cluster both for extent and fertility. The country is populous and well cultivated, and the natives of a light colour. Several good harbours are found upon the coasts of this island. The natives have always behaved respectfully to strangers, and many circumstances conspire to promise greater blessings awaiting them.

There is another island called Rooahoga, considerably elevated and fertile; and besides these, Captain Wilson, is reported to have discovered some more. Nor can it be ascertained with any positive certainty, whether or not there may not be several adjacent islands still undiscovered.

Digitized by Google

GENERAL ASPECT, CLIMATE, AND PRODUCTIONS.

THE objects which present themselves to view in the South Seas, are both grand and sublime. Gliding along the immense ocean, where natural appearances are widely different from those in the northern hemisphere, the stranger is agreeably surprised with the appearance of islands, or little worlds, amid the ocean. Thus stationed in his vessel, he beholds the vast watery scene beginning to be diversified by rising mountains seen at a great distance, at first scarcely visible to the eye, but gradually assuming an elevation that renders them perceptible at the distance of sixty miles.

But approaching nearer, instead of beholding these mountains barren and naked, he is surprised with the view of heights almost inaccessible, lined with steep and lofty hills, and crowned with a luxuriant vegetation. Plantains, yams, and a variety of other roots, which afford support to the inhabitants, are found growing spontaneously in these elevated regions. Here also grow trees of various kinds, with which the mountains are clothed to the very summits, presenting to the distant beholder the appearance of a green lawn. The surrounding prospects from the tops of these hills fill the mind with mingled sensations of majestic dread, uncommon pleasure, and inexpressible amazement.

"We hardly believed our eyes," says M. de Bougainville, "when we saw a peak covered with woods up to its highest summit, which rises above the level of the mountains in the interior parts of Otaheitee. Its apparent size seemed to be more

Digitized by Google

than thirty toises in diameter, and grew less in breadth as it rose higher. At a distance it might have been taken for a pyramid of immense height, which the hand of an able sculptor had adorned with garlands and foliage." One of the mates of the Dolphin, with a party of marines and seamen, penetrated into the interior parts of this island; and having ascended a mountain which they supposed to be a mile high, they discovered mountains before them so much higher, that with respect to them they seemed to be in a valley. Towards the sea, the view was enchanting, the sides of the hills were beautifully clothed with wood, villages were every where interspersed, and the intermediate valleys afforded a still more beautiful prospect; for there the houses stood thicker, and the verdure was more luxuriant. Mr. Forster with other gentlemen ascended to the summit of one of the highest mountains in this island, from whence they had a prospect of the island of Huaheine, and some others lying at the distance of forty leagues. The view of the fertile plain below them, and of a river making innumerable meanders, was delightful in the highest degree. The vegetation on the upper part of the mountains was luxuriant, and the woods consisted of many unknown trees and plants.

The rivers are both numerous and large. Issuing from the bowels, or flowing from the tops, of the mountains, they are augmented in their course by the descending rains, and swell into such mighty torrents, that the rocks are sometimes removed by their violence, and the stoutest trees torn up by the roots. But at other times these rivers glide in singular beauty from their lofty sources, meandering through the fertile valleys, amid the verdant

Digitized by Google

scenery of those luxuriant plains, and, if possible, adding to their fertility and beauty.

Nor are these islands devoid of lakes. Between the declivities of one of the mountains in the district of Byeorde, is a lake of excellent fresh water, and around its banks are many dwellings, where the inhabitants enjoy plenty of every thing, except the bread-fruit, for which they substitute the mountain plantain. This lake issues forth with a pleasant flow into the valley, and greatly enriches the circumjacent scenery.

These islands for the most part are encircled with bays and creeks, and some are favoured with excellent harbours, where vessels may safely rest. These render commerce both practicable and easy; and the time may not be very distant, when in these harbours the produce of Europe shall be exchanged for the improved produce of these highly-favoured islands.

Bread-fruit, cocoa nuts, bananas, sweet potatoes, yams, juniper, sugar-cane, the paper mulberry, and several sorts of figs, are natural and almost spontaneous productions. The mountain sloe-tree, the plantain-tree, the precious sandal-tree, and many others, also flourish in all their beautiful verdure. And if these arrive at such perfection in their present state, what would they not under the fostering hand of cultivation? Nor can it be doubted, that the fertile valleys which border the coasts might produce sugar-cane in equal perfection to any in those places where it proves such a profitable article. And how pleasant to humanity would it be to see these planted, cultivated, and manufactured by the natives, rather than by these poor unhappy partners of human nature who groan under the lash in the West-India islands.

Digitized by Google

The climate of these islands considering their latitude is very temperate, to which the elevation of the greater part of them may probably contribute.

The seasons are variable; for in some islands the crop is some months earlier than in others; but in all, they merit the appellation of *favorable*. In this the kindness of the Ruler of the universe is peculiarly obvious; because the untutored state of the human mind in these regions is unqualified to combat the hardships of unfavourable seasons, or to provide against the direful consequences.

Besides the domesticated animals, which aid in feeding the inhabitants, the winged tribe is very numerous. Nor are these confined merely to the tame race, but widely extended to many wild fowl, which the ingenuity of the inhabitants, even in their uncultivated state, find means to convert to substantial use. Hogs, dogs, and poultry compose their tame animals; and wild-ducks, pigeons, parroquets, doves, woodpeckers, with a vast multitude unknown in the northern world, compose their wild race. The mountains both sparkle with the beauty of their feathered inhabitants, and resound with the melody of their songs; nor is it easy to describe the sensations of a contemplative European, when he wanders amid such a profusion of natural pleasures.

But the sea also affords her tribute to the Otaheitean table. All around the coasts of these different groups of islands, multitudes of fine fish unknown to Europeans play in crowds; so that when the land withholds her stores, the natives have recourse to the sea; and thus the year is crowned with plenty, and they pass their days in luxuriant indolence.

Digitized by Google

In what an eminent degree these facts prepare the way for the civilization and religious instruction of the inhabitants, is sufficiently evident; because, under proper culture, these spots of the earth would produce food for six times the number of inhabitants. Nay, in addition to all the natural productions of the country, the introduction of the plants of other countries would fully supply the wants of the new settlers. These also might be planted in many parts of that fertile soil, which now lies uncultivated, and wastes its natural vigour in vain. The Indian corn, for instance, which they at present neglect, would produce a crop every three months, and the vines would add greatly to their stock of fruits.

CUSTOMS, MANNERS, &c. OF THE INHABITANTS OF THE OTAHEITEAN ISLANDS.

THE inhabitants of the Otaheitean islands are in general of a larger make than the Europeans. Nourished with plenty and fostered in indolence, the human body appears more vigorous and larger. The males are tall, robust, and well proportioned; and some of them arrive at the height of six feet. Unlike the original inhabitants of America, they have long beards, which they wear in various forms. Their shoulders are broad, and their muscular complexion conveys the idea of strength rather than beauty. Their features are so various, that it is difficult to fix upon any general likeness which characterises them. They possess what are deemed good eyes and teeth, but the latter are not so well set, nor so

Digitized by Google

white as among the Indian nations. Few of them, however, have that unpleasant thickness of lips so common to the natives of other islands. The initiatory rite of the Hebrews is generally practised among them from a motive of cleanliness, and they upbraid those who do not adopt this custom. Contrary to the fashion of other countries, the men wear their hair long, and the women cut theirs short.

The women are less distinguished from the men by their features, than by their general form, which is destitute of the strong firmness of the latter. Though the features of some of them be very delicate, and a true index of their sex, yet the rule is not so general as in most other countries. Their shape is usually well proportioned, and some of them are perfect models of a beautiful figure; but the extraordinary smallness and delicacy of their fingers, forms the most striking distinction of the Otaheitean females.

The women of the higher class are above the size of English ladies, but those of the inferior rank are below the common standard, and some are uncommonly short. The obvious causes of this diversity, are the circumstances in which the latter are placed. The natural complexion is a fine clear olive colour, and the skin delicately smooth and soft. Their faces are in general handsome, and their eyes full of vivacity. Their teeth are remarkably white and regular, their hair usually black, and their breath, in general, is perfectly sweet.

Their dress, like their persons, is widely different from that of Europeans. During the dry weather they wear cloth, and in the rainy season matting; but no shape is preserved in the pieces,

Digitized by Google

nor are they sewed together. The women of superior rank wear three or four pieces; one, of a considerable length, they wrap several times around the waist, and allow it to fall down to the middle of the leg. Two or three other short pieces, with a hole cut in each, are placed in one another; and their heads coming through the holes, the long ends are suspended before and behind, both sides being open; by which means they have the free use of their arms. A piece of cloth, of the manufacture of the country, is frequently tied round the head in the manner of a turban; and the women plait human hair in a very curious manner into long strings, which being folded into branches, are sometimes bound by way of ornament upon their foreheads.

The men dress in a similar manner, differing only in this particular, that one part of the garment, instead of falling below the knees, is brought between the legs. This dress is worn by all ranks, the only distinction consisting in its quality. At noon, both sexes appear almost naked, wearing only a piece of cloth round the middle of their bodies. They shade their faces with a kind of bonnets, constructed of cocoa-nut leaves, which they dexterously weave in a few minutes. Both men and women wear ear-rings on one side, made of shells, stones, berries, and small pearls; the European beads, however, upon their arrival, soon supplanted these. Boys and girls go quite naked, the former to the age of five, and the latter to that of seven or eight. The children soon acquire strength to walk, and are not long in learning to swim.

All the inhabitants have a singular custom of staining their bodies, by indenting the flesh with

Digitized by Google

a small instrument made of bone, cut into short teeth; and the indentures are afterwards filled with a dark blue mixture, prepared of an oily nut and water. This operation, which is usually undergone about the age of twelve, is extended to different parts of the body, and the consequent pain is endured with singular resolution, because these marks are peculiarly deemed honourable.

This country is stored with plenty for the food and comfort of man. Both animal and vegetable food loads the tables of the natives. The vegetable chiefly consists of plantains, cocoa nuts, bread-fruit, yams, and some others that have been introduced by Europeans. And as the soil is not only qualified to produce the vegetables of England, but also to rear them in great perfection, there is reason to hope that the kitchen garden will soon increase in its productions.

The animal food of the natives is very plentiful. Hogs are there in abundance, and their number is greatly increasing. The fowls common to this country load the table, and even dogs are highly relished. Hogs, fowls, and turtle, seem however to be considered as dainties, and are chiefly found on the tables of persons in the higher ranks of life.

Their cookery consists chiefly in baking, the mode of which deserves particular notice. When the bread-fruit is ripe, they make a large oven, and the chief summons all his dependents to bring a certain quantity of bread fruit, against an appointed day to his house. They are next sent to the hills, and every man brings a burden of wood; they then dig a hole eight or nine feet deep, paving it in the bottom, and building it round with large pebbles,—this done, they fill the hole with

Digitized by Google

wood, and set it on fire, and when it is burnt, and the stones thoroughly consumed, they spread the embers on the bottom of the pit with long poles, and strew leaves at the bottom. Then the oven is thatched as quickly as possible with grass and leaves, and the earth which was dug out cast over the whole. After some days, it is fit for use, and, making an opening, they take it out as it is wanted;—they use little else during the time it lasts.

The delight they have in this food has induced them to contrive means to preserve it, so that it may be used cold: this is done by making it into balls, and rolling it up in plantain leaves. To such a perfection have they already arrived in this, that they will preserve it for several weeks.

Their drink is generally confined to water or the milk of cocoa nut. There is a kind of juice however called the Kava, of which their chiefs and more opulent people drink: and the natives have sometimes been known to drink English liquors, until they have been inebriated: but upon feeling its effects, they have carefully avoided repeating the same a second time.

The inhabitants of these islands begin their meals with the ceremony of washing the mouth, and some of them with an act of devotion: after this, they eat a handful of bread-fruit and fish, dipt in salt water alternately, until the whole is consumed; they also take a sip of salt water between every morsel. This dish is succeeded among the chiefs by a second course of plantains or apples, which are always peeled. After this, a soft fluid of paste is prepared from the bread-fruit, which they drink out of cocoa-nut shells,

and this concludes their meal. Having thus refreshed themselves, they again wash their hands and their mouth. Mr. Banks says, these people eat an astonishing quantity of food at a meal, for he saw one of them devour three fish of the size of a small carp, four bread-fruits as large as a common melon, thirteen plantains seven inches long, and about half as large round; to all which he added a quart of paste, by way of drink. It is singular, however, that they are capable of enduring hunger to a great degree; and notwithstanding their voracious disposition, they will voluntarily suffer want, rather than not afford plenty to a stranger. This fact affords an indisputable proof of the hospitality of their dispositions.

Although fond of society, they are quite averse to any conversation during the time of meals; and indeed they are so rigid in the observance of this, that even brothers and sisters have separate baskets of provision, and generally sit at the distance of some yards, with their backs to each other, when they eat, and will not exchange a single word during the whole time. The middle-aged, who occupy the superior ranks of life, usually go to sleep after dinner; but those who are more advanced in life seldom or never take that indulgence.

The horrible custom of human sacrifices is one of these uncommon facts, for the belief of which the mind requires the strongest evidence; therefore we shall accurately follow the narration given by Captain Cook, who, in order to obtain the strongest certainty, was present at one of the melancholy solemnities. Having obtained leave of the king of the island, he set forward with two

other gentlemen in a canoe in which was placed a half-starved dog, and two or three red feathers tied up in a tuft. A priest also went along with them, who was to assist in the solemnities. On their arrival at the morai, or burying-ground, the sailors were ordered to remain in the boat, and the captain and his companions were requested to uncover their heads. Several men and some boys went along with them, but no women were present.

They found four priests with their assistants waiting, and on their arrival, the ceremonies commenced. The dead body was in a small canoe that lay on the beach, fronting the morai. Two priests with several of their attendants sat by the canoe, and the rest at the morai. The king of the island, with Captain Cook, and his companions stopped at the distance of thirty paces from the priests; and the crowd of spectators were placed at a greater distance.

After some time, one of the assistants of the priests approached with a young plantain branch, and laid it before the king, and another approached, bearing a small tuft of red feathers, twisted on some fibres of the cocoa-nut husk, with which he touched one of his majesty's feet, and afterwards retired with it to his companions. One of the priests at the morai now began a long prayer, and at particular intervals, sent down young plantain trees, which were placed upon the sacrifice. During the prayer, one of the natives stood by the priest, holding in his hands two bundles, in which were the royal ensigns, and the ark of the Deity. The prayer being ended, the priests at the morai, and their assistants, went off carrying the two bundles, and placed themselves by the two priests who were

upon the beach. Here prayers were renewed, and the young plantain trees were taken off the dead body. The sacrifice was then wrapped up in cocoa-leaves and small branches, taken out of the canoe, and laid upon the beach. The priests surrounded the victim, some sitting, others standing, and one or more of them repeating sentences for about ten minutes. The body was next stripped of the leaves and branches, and placed parallel with the sea shore. Then one of the priests, standing at the feet of the victim, uttered a long prayer, in which he was occasionally joined by others, each of whom held a tuft of red feathers in his hand. During the progress of this part of the service, some hairs were pulled off the head of the intended sacrifice, and the left eye taken out: these were wrapped up in a green leaf and presented to the king; but instead of touching them, he gave the bearer a tuft of red feathers, which together with the hair, and the eye, were taken to the priests. Not long after, the king sent another tuft of feathers, in the course of the last ceremony, and on a king's-fisher's making a noise, he turned to the captain, saying, "That is the *Eatooa*," or Deity; and seemed to consider this as a favourable omen.

The body was next carried a little way, and laid under a tree, near which were fixed three thin pieces of wood, neatly carved. Some bundles of cloth were then placed on a part of the morai, and the tuft of red feathers laid at the feet of the sacrifice, round which the priests stood. The chief priest spoke for about a quarter of an hour, with different tones and gestures, appearing sometimes to expostulate with the dead, at other times asking him questions, and then making various demands. He then prayed about half an

hour in a whining tone, in which he was joined by two other persons; and one of them, during the course of the prayer, plucked some hairs from the head of the sacrifice, and placed them upon one of the bundles; then the high priest prayed alone, holding in his hand the tuft of feathers he received from the king. Having finished, he gave them to another priest, who prayed in like manner, and then all the tufts of feathers were placed upon the bundles of cloth, which terminated the ceremony at this place.

The victim was next conducted to the most conspicuous part of the morai, with the feathers and the two bundles of cloth, the drums in the mean time beating slowly. The bundles and the feathers were then laid against a pile of stones, and the sacrifice at the foot of them; while the priests again encircled the body and renewed their prayers, and their assistants dug a hole into the earth about two feet deep, into which they threw the victim, and covered it with earth and stones. While they were depositing the body in the grave, a boy squeaked aloud; upon which the captain was informed, that it was *Eatooa*, or the god. Then a fire was kindled, and a half-starved dog produced, killed by the twisting of its neck, the hair singed off, the entrails taken out, thrown into the fire, and left to be consumed; but the kidneys, heart, and liver were baked on heated stones. The victim having been rubbed with the blood of the animal, was, with the liver, heart, and kidneys, laid down before the priests, who were seated around the grave, praying. They continued for some time uttering ejaculations over the dog, while two men at intervals beat very hard upon two drums, and a boy screamed in a loud shrill

Digitized by Google

voice three times: this was intended to invite the *Eatooa* to feast on the banquet they had prepared for him.

When the priests had finished their prayer, the body of the dog, with the heart, liver, and kidneys, were placed on a scaffold about six feet high, on which lay the remains of two other dogs, and of two pigs that had been lately offered. The priests and their attendants uttering a loud shout, the ceremony concluded for that day.

Early next morning, the captain and his companions were conducted to the morai, where the priests and a great multitude of people were assembled. The two bundles of cloth were in the place they occupied the former night, the two drums were in the front of the morai, and the priest stationed beyond them. The king placed himself between the drums, and desired Captain Cook to stand by him.

The ceremony recommenced with bringing a young plantain tree, and laying it at the king's feet. The priests then prayed, holding in their hands several tufts of red feathers, and a plume of ostrich feathers. The prayer being ended, the priests placed themselves between the Englishmen and the morai; and one began to pray, and continued about half an hour. During this prayer, the red feathers were put one by one upon the ark of the *Eatooa*. Then four pigs were produced, one of which was instantly sacrificed, and the other three were taken to a neighbouring sty.

The maro with which the Otaheiteans invest their kings, was now taken out of a cloth, and spread on the ground before the priests. It was a girdle of about fifteen feet long and one foot and a quarter broad, and appears to be put on in the

Digitized by Google

same way as those islanders wrap the piece of cloth round their middle. The ornaments of this royal robe were yellow and red feathers, ranged in two rows in square compartments, so as to produce a very pleasing effect. They had originally been fixed upon a piece of cloth manufactured in the island, and afterwards sewed to the upper end of the pendant which Captain Wallis left flying on the shore upon his first arrival at Matavai. The priest pronounced a long prayer relative to this part of the ceremony; and the badge of royalty was again folded up and put into the cloth.

The other bundle was next opened; but the English gentlemen were not permitted to approach sufficiently near to examine its mysterious contents. The intelligence obtained respecting it was, that it contained the *Eatooa*, or a representation of him. This sacred repository nearly resembles the ark of the God of Israel: its figure is circular, and one end considerably thicker than the other.

The pig which had been slain was now cleansed, and the entrails taken out. It happened to have many of those convulsive motions which frequently appear in an animal when killed, and this was considered as a very favourable omen by the spectators. Having been exposed for some time, the entrails were laid down before the priests, one of whom closely inspected them, and for this purpose gently turned them with a stick. When sufficiently examined, they were thrown into the fire; whilst the sacrificed pig, with the heart, liver, and kidneys, were put upon the scaffold, where the dog had been previously deposited; and all the feathers, except the ostrich plume, being enclosed in the ark, the whole solemnity closed.

Four canoes lay upon the beach opposite to the

Digitized by Google

morai all the time of the solemnity, which were intended to carry the things belonging to the *Eatooa*; and on the fore part of each was fixed a small platform, covered with palm leaves tied in mysterious knots.

The inquisitive mind is strongly perplexed how to account for the resemblance that appears between these and some of the Jewish customs—the similarity in the ark, its being considered as the symbol of the presence of the Deity, and with its sacred deposit attending the fleet. Whatever be their origin, one cannot read the last mentioned, fact, without recollecting that the children of Israel, in the day they were sorely beset by the Philistines, sent and brought the ark of the covenant of the Lord into the camp in hope of being saved thereby.

The unhappy victim on such occasions is unapprised of his fate, and suddenly slain unawares. Some great chief fixes upon the victim, and sends one of his trusty servants to slay the person. The presence of the king is also needful on such an awful solemnity; it is called the "king's prayer;" and the place where such sacrifices are performed is usually the burying place of the Otaheitean monarchs.

This horrid practice of offering human sacrifices can upon no principles whatever cease to be detestable; but, if possible, it is rendered still more abominable by the levity and indifference attending the same. Instead of the mind being impressed with solemn reverential awe, the multitude remained unconcerned spectators; and even the priests, when not directly employed, displayed the most shocking insensibility. They conversed familiarly together, and the only decorum observed was

Digitized by Google

to defend the consecrated spot from the populace and the English strangers.

It is proper, however, to mention, that they are open and candid in answering any questions which are put to them concerning their religious system. Being asked, what was the design of this inhuman institution? they replied, that it was an ancient custom, and highly pleasing to their god, who came and feasted upon the sacrifice, in consequence of which he answered their prayers. When it was objected, that he did not certainly feed on these, as he was not seen to do so, nor were the bodies of the consecrated animals seen consumed, and that the interring prevented his feeding upon the human sacrifice,—they replied, that he came in the night invisibly, and fed only on the soul or immaterial part, which, they say, remains about the place of sacrifice until the carcase is totally wasted by putrefaction.

Is is highly probable, that human sacrifices prevail in all or most of the South Sea islands, however separated these may be; and although it appears that not more than one of these are devoted at once, yet they occur so frequently, that they certainly make great havock of the human race; for Captain Cook counted no less than forty-nine skulls of former victims lying before the morai, and none of them had suffered any considerable decay.

But that of human sacrifices is not the only horrid custom prevailing in the southern isles. For besides cutting out the jaw-bones of their enemies slain in battle, and carrying them about as trophies of their victory, they in some measure sacrifice the whole of their bodies to the god of the country. Whenever they have gained a victory in battle,

Digitized by Google

they collect all the dead; and bringing them to the morai, they dig a large hole, and with great form and ceremony, bury them as so many offerings to their divinities.

If any of their own chiefs fall in battle, their bodies are brought to the morai, where the priests cut out their bowels before the great altar, and their remains are afterwards interred, near a great pile of stones. The common men who lose their lives in the battle are interred in one large hole dug at the foot of the pile. This is done the day after the battle, amidst a great concourse of people, with much pomp and ceremony, as a thank-offering to the *Eatooa* for their success.

There is another base custom that prevails in a society composed of a certain class. These having no concern in the government, or any distinct property, associate for their own and the amusement of the public. They travel from place to place, and from island to island, not unlike the strolling players in England. These admit of no marriages, and no married people can obtain admittance into their society. It is also a rule among them never to be encumbered with children: and if any of the women happen to be pregnant they must either secretly murder their offspring, or endure the shame of being expelled the society. It appears, however, that the circumstances of an indiscriminate connection among these islanders is either misunderstood or greatly exaggerated; for those acts of lewdness, which have so generally stained the character of these islanders, are chiefly to be ascribed to the brutal conduct of European sailors.

Marriage appears to be performed among these people without any religious formality, but various ceremonies ensue. If a woman be a virgin, the

Digitized by Google

father and mother present an offering of a hog or fowl, and plantain-tree, to their son-in-law before they can touch any of his provisions; but if the woman be a widow, or separated from her former husband, this ceremony is dispensed with. The relations of the bride make a present of hogs, cloth, and other articles to the new married pair. So long as they agree, they live either on the husband's or the wife's estate; but if they separate, each retains their own property.

When a woman marries, she immediately provides herself with a shark's tooth, fastened with the gum of the bread-fruit on an instrument which leaves about a quarter of an inch of the tooth bare, resembling a lancet, for the purpose of wounding the head. Some have two or three teeth, and when struck forcibly, they bring blood in copious streams; according to the love they bear the party, and according to the violence of their grief, the strokes are repeated on the head. To such a degree has this ridiculous practice been sometimes carried, that a fever has ensued and terminated in lunacy. If any accident happen to the husband or his relations, and even if his child fall down and hurt itself, the shark's tooth is immediately seized, and through the use of this instrument and the violence of grief, the blood and tears of the mourner soon mingle. The child succeeding to the honours of the family, any insult offered to him is more deeply felt by the parents than if done to themselves. And should the child die, the house is immediately filled with the relations, wounding their heads and making bitter lamentations.

Grief is a strong and powerful emotion in the mind, and generally most violent in the uncul-

vated state of human nature. Thus the inhabitants of the southern isles express their grief by the most violent emotions, and it is from the custom of beating their faces upon these occasions that originates the mark which most of them have upon their cheek-bones. The repeated blows inflicted by them upon this part rub off the skin, and cause some blood to flow out; and when the wound is green, it resembles a hollow circle made by burning.

On some more calamitous occasions, they cut this part of the face with an instrument. This is principally confined to the chiefs. When any person of quality who was related to them dies, they burn their temples; on the death of a mother, the mark is made upon the left side; on the death of a father, it is made upon the right side; and on the death of the high priest, the first joint of the little finger is amputated.

Parents, upon the death of their children, besides other tokens of grief, cut their hair short upon one part of their head, leaving the remainder long. This frequently forms a square patch on the forehead, but is sometimes left in its usual state, and all the rest of the hair cut off.—Sometimes a bunch is left over both ears, at other times over one only; and sometimes one half is clipped quite close, and the other left to grow long. These signs of mourning are often prolonged for two or three years.

The manner of treating their women in child-bearing is peculiarly pernicious. When a woman brings forth a child, a kind of hut is raised in the house with cloth and matting; heated stones are then placed, with sweet herbs and grass spread over them; water is afterwards poured upon

them; and the woman is closely shut up in the steam, which rises till she be in a strong perspiration and can endure the heat no longer. Hastening from this vapour bath, she plunges in the river; and having washed herself, she puts on her clothes and takes the child to the morai. This often brings on an ague: but such is the strength of prejudice, that no arguments can persuade them to abandon a practice so injurious to their health.

A temporary house is erected on the sacred ground adjoining the morai; where the mother and the child remain for a certain time, and the father usually makes an offering of a young pig or fowl, with a plantain-tree. The period of seclusion for a male is two, and for a female three weeks; during which time the mother touches no food, but is fed by another:—and should any person inadvertently touch the child in this period of seclusion, he must undergo the same restrictions, until an offering of a young pig or fowl be presented, which finishes the ceremony of separation.

The child is then removed to another temporary house, in which the father and the mother reside; but according to the prejudices of the country, they may not touch the child in the same clothes in which they take their victuals. To remove this prohibition, a second offering must be made by the father and uncles, a third by the mother and aunts, a fourth before the child returns to the house where the father and uncles eat, and a fifth, on the same account, for the mother and aunts.

If the child happen to touch any thing previous to the termination of these days of purification, it is deemed sacred; and if any thing touch the child's head before the offering of purification, it must be instantly deposited in a consecrated place; but

Digitized by Google

should it be a branch of a tree, the tree must be cut down; and if, in its fall, it penetrate the bark of another tree, that must also be cut down, because reckoned unclean.

No small degree of respect is displayed towards a chief when he travels. When a chief or stranger of superior rank comes from another island, all those of his own rank present their peace-offering. There are also large and spacious houses erected for the reception of strangers: to one of which the noble visitor is conducted; the chiefs of the district assemble round him attended by a priest, who offers up a long prayer, and having several young plantain-trees, he places a bunch of red feathers on one of these, and, with a pig or fowl, lays them at the stranger's feet, who takes the feathers and fixes them in his ear, or among his hair. The inferior priests repeat a similar offering, and a feast is immediately provided with the usual presents. When one of the higher class visits any place he is sure to find a numerous body of men waiting to receive him; the preparations are sumptuous, and he may every day have a repetition of feasts, without any diminution in respect of plenty or a welcome reception. The force of example is also so powerful among the lower order, that they frequently manifest their hospitality, when they can very ill afford it.

The singular custom of exchanging names also obtains among these islanders. This often produces considerable embarrassment to strangers, so that the persons with whom they were formerly acquainted may soon be unknown to them. The names of places and things continue, unless they happen to consist of syllables containing the king's name; and should this be the case, they are chang-

Digitized by Google

ed during his life time, and upon his death the common name is resumed.

Another singularity among the South Sea islanders is disrespect for old age. The writer of the Voyage of the Duff informs us, that a venerable priest, grandfather of the king, was scarcely noticed by those who visited Captain Wilson. And on that occasion one of the aged seamen was frequently the object of their derision. The reverse, however, appears to be the case at Tongataboo; for there the younger persons observe a respectful silence in the presence of the aged.

It is customary to preserve the bodies of the chiefs, and even those of their children. This is done by taking out the viscera, drying the body with a cloth, and anointing it, both internally and externally, with perfumed oil; which operation is frequently repeated. The agent is consequently deemed unclean, and may not touch provisions for the space of a month. The relations of the deceased perform their part of the funeral rite, by presenting the corpse with a piece of cloth and some provisions. They indulge their superstition yet farther, by acting some of the more tender and affectionate scenes of life anew before the corpse. The shark's tooth is frequently employed, and the garments of the dead stained with the flowing blood. During the continuance of any noxious smell they cover the body with garlands of flowers, and anoint it with sweet-scented oil.

Upon the death of a king or chief, the corpse is carried to every part where he had property, or where his particular friends reside; the funeral ceremonies are repeated; and after the regular tour, the body rests at the place of his usual residence.

Digitized by Google

These preserved bodies are kept above ground, and are liable to be taken prisoners in war. Nay, the person who seizes the body of a chieftain has a right to assume his name; consequently, in the time of war these are conveyed to the mountains: and it is customary also to take Captain Cook's picture along with them, because the loss of it would be equally afflictive as that of a chief; nay, the conqueror might, according to their law of succession, lay claim to the district allotted him.

Our readers may probably be gratified with the narrative of the following ceremony. According to the editor of Cook's Voyages, Mr. Banks being informed that he could not be present unless he performed a particular part, consented thereto, rather than not have his curiosity gratified. Accordingly he repaired in the evening to the place where the body was deposited, and was there joined by the relations of the deceased, and afterwards by some other persons. The principal mourner had a very whimsical dress, although not altogether ungraceful.

Mr. Banks was constrained to change his European dress, and had no other covering than a piece of cloth, bound round his waist. His body, and the bodies of several others were blacked over with charcoal and water, and among the company were some females.

The funeral procession then commenced, and the chief mourner, on approaching the body, uttered some words, which were judged to be a prayer; and he repeated these words as he came up to his own house. They then went on, by permission, towards the fort. It is usual for the rest of the natives to shun these processions as much as possible; and therefore they ran into the

Digitized by Google

wood immediately upon the view of the funeral procession.

From the fort, the mourners proceeded along the shore, crossed the river, entered the woods, passing several houses, from which the inhabitants fled, and not a native was seen during the remainder of the procession. Those who assisted at the ceremony, bathed in the river, and then resumed their former dress.

We have already observed that the southern isles are loaded with an abundance of all the necessaries of life; the inhabitants therefore pass their days in indolence: their years are spent without toil, nor are they subject to any controul. The authority of a master, and the apprehension of want, are unknown. Their leisure is great, therefore invention is employed to divert the tedious hours—Hence their sports and amusements are numerous.

The infancy of society, and the infancy of human life, are analogous. The child delights in sports and trifling amusements, and so do men in the infant state of society. The rudeness of an untutored mind also appears conspicuous in the amusements of uncultivated society. These observations are exemplified in the amusements of the inhabitants of the South-Sea islands.

The predilection for mu ic is very strong, and the mode of performing singular in the southern world. There the musicians perform on an instrument, somewhat resembling a flute; but the performer blows with his nostril instead of his mouth, and he is accompanied by others singing a certain tune. The principles of his art are few, and these very imperfect.

There are also a kind of itinerant musicians, who

afford entertainment to their countrymen by a rude concert of drums and flutes. The drummers sing to the music; and it was the cause of no small astonishment to the English, that they were the subject of their song. It is therefore obvious, that these songs must have been extempore effusions; which evinces, that in some the power of ready invention is singularly strong, even among these untaught natives. These songs consist of only two lines, and are frequently sung for evening amusements between sun-set and bed time. During this period, they burn candles made of an oily nut, fixing them one above another upon a small stick that is run through the middle. Some of these candles will burn a long time, and afford a very tolerable light.

The drums used in musical entertainments are formed of a circular piece of wood, hollow at one end only, which is covered with the skin of a shark, and beaten with the hand instead of a stick.

Man in an uncultivated state displays a fondness for power, and an exultation in his bodily strength. To be able to throw a weighty substance, or to throw a large stone to a considerable distance, and to have power over his companions, in consequence of superior strength, are things which delight the uncultivated peasant and tend to exalt him above his equals. The same operations of human nature display their existence in the uncivilized state of the southern islanders.

Proud of their bodily strength and agility, they are for the most part dexterous wrestlers. In challenging each other to this combat, they strike the bend of the left arm, and if left-handed, they reverse the stroke. The bended arm receives the

Digitized by Google

hand upon its cavity, and emits a loud report. The man who accepts the challenge throws both his arms forward to seize his antagonist. Sometimes a few engage in these combats, and sometimes a whole district. When the latter happens to be the case, both men and women wrestle, and the females are always honoured with wrestling first. The late visitors of that part of the world inform us, that the queen excels in this amusement; and when the women of any district are victorious, they immediately strike up a dance. The queen usually determines the number of falls which shall ascertain the victory, nor do the vanquished manifest the least dissatisfaction. It is true, indeed, that in consequence of the warmth of the female temper, the women usually bear their disappointment worse than the men, and exhibit stronger signs of anger at being overcome. When any one throws his antagonist, he walks round the spectators, clapping his hands, and the vanquished party retires in silence.

Feats of wrestling are sometimes performed for public entertainment. Captain Cook was entertained with one of these upon a visit to a chief. He and his associates were conducted to a court-yard, near the house of the chief, who was placed at the upper extremity of the area, and several of the principal men on each side, who appeared to be the judges of the contest. Ten or twelve combatants entered the area; after the usual modes of challenging they engaged, and each endeavoured to throw his antagonist by mere strength. Seizing each other by the hand or some other part of the body, artfully grappling until one, either by having a greater hold or possessing stronger muscular force, threw the other on his back.

Digitized by Google

One engagement succeeded another; but if the combatants could not throw each other in the space of a minute, careful that even these wrestlings should be attended with no injury, they then parted, either by consent or by the intervention of friends. A man with a large stick officiated as master of the ceremonies, and severely beat those who rashly pressed forward.

During these athletic sports, another party of men performed a dance. But neither party took the least notice of each other, their whole attention being only engaged to please and to conquer. Equally careful to avoid injury, this contest only continued about the space of a minute. In this circumstance, the Otaheiteans exceed both the Roman and the European wrestlers, who continue till the body is injured, if the life be not taken away.

The science of defence is greatly cultivated among them, a wound in battle conferring no honour, but rather disgrace. From their earliest years they are practised in this art. They frequently exercise at quarter-staff, and soon become expert at defending the head and every other part of the body.

The sling constitutes one of the boyish sports of Europe, and those children in improvement, manifest a strong partiality for this amusement. Nor has the want of proper materials for slings prevented the enjoyment of this pleasure. Invention has enabled them to plait the fibres of cocoa-nut husk. These slings have a loop for the hand in one end, in order to keep the sling fast when they discharge the stone, and a broad place is constructed for the reception of the stone. In charging the sling they hold it round their shoulders, keeping the stone

Digitized by Google

fast with their left thumb, and, jumping, swing the sling three times round their heads, holding the left hand grasped on the wrist of the right; and, thus they discharge the stone with a force sufficient to enter the bark of a tree at two hundred yards distant, the stone flying at an equal distance from the ground all the way.

But the most delightful amusement must soon be relinquished for another, or the pleasure of amusement is at once destroyed. European boys have their annual and successive sports, and so have the natives of the southern islands. The sling is laid aside, and the bow eagerly seized. Their bows are constructed of porow, and their arrows of small bamboos, painted with toa wood, which is fixed on with bread-fruit gum; the bark of the roava affords them bow-strings:—with these they contend, not at a mark, but for the greatest distance. The bow is never honoured with employment in war, but the sling appears in that destructive science. Since they have used guns from the Europeans, they have become excellent marksmen. It is a singular fact, that, as in more cultivated nations, the sportsman and the hunter have a dress peculiar to that employment, so these islanders have a dress sacred to the game, and never worn but on such an occasion.

The javelin succeeds to the sling and bow. It is from eight to fourteen feet long, and pointed with palm-tree wood. They hold the javelin in the right hand, and pitch it over the fore finger of the left hand, in which position they will hurl it with great exactness against a mark set up at the distance of thirty or forty yards. As one district in the highlands of Scotland was formerly accus-

Digitized by Google

tomed to contend against another in playing at the ball, so one district of the southern world, in their present rude state, often contend against each other in throwing the javelin. Nor are the females exempted or less eager than the men. The only prize is, that the district in which the game is played affords an entertainment. It is proper, however, to remark, that the women and the men contend separately: the women combat with women, and the men with men.

Swimming is another bodily exercise, of which they are extremely fond. Those who live in the vicinity of the sea, or upon the brink of a river, universally manifest a partiality to swimming. The insulated situation of these men invite to this employment, which they have carried almost to incredible perfection. The children learn to swim almost as soon as they learn to walk; and therefore gradually arrive at perfection. Swimming in the surf is an amusement in high repute with both sexes, and the entertainment is estimated in proportion to the largeness and violence of the surf. This sport is continued for hours together, till they be quite tired: on no other occasion do they make such exertions.

Some use a small board, about two feet and an half broad, formed with a sharp point like the fore part of a canoe; but others depend wholly upon their own strength and dexterity. They usually swim out as far as the surf begins, which they follow as it swells, throwing themselves upon the surface of the water, steering their body with one leg, their breast reposing on the wooden plank, the other leg raised above water, and one hand moving them forward. When the surf increases its strength and motion, they are carried forward with an amazing velocity, until it be about to break upon the

Digitized by Google

shore; but then, they turn about with so rapid a movement, as to dart head foremost through the wave, and ascending on the surface, swim back to the place where the surf begins to swell, diving all the way through the waves, which are running with violence against the shore. In the course of this amusement, as might naturally be expected, they frequently run against each other:—sometimes also they are driven on the shore, and considerably bruised.

The children arrive at such perfection in swimming, that they likewise engage in the same amusement, only choosing a smaller surf; and seldom or never receive any injury, except a throw upon the beach. It is also astonishing, and scarcely credible, that if a shark come in among them, unapprehensive of any danger, they will surround him, and, enclosing him in the surf, force him on shore. When the bad weather abates, a westerly wind attended with a heavy swell prevails, during which time this amusement is generally practised.

The dances of the southern islanders are various. That called the evening dance is performed by women of any age, or any description, who chuse to attend; and their usual place of meeting is the cool shade. On such occasions, they are drest in their best apparel, and their heads decorated with wreaths of flowers.

There is another dance termed the *heiva*, performed by men and women in separate parties.—The women are graceful in their dress, regularly keeping time along with the music, both with their hands and their feet. The manner of this dance is accurately represented in Cook's Voyages, and is usually performed by torch light.

The southern islanders, living in a warm climate, possessing a luxurious country, and surrounded with countless blessings of life, have consequently had but few calls of necessity to exert the powers of ingenuity. The first of these however were of a mechanical nature. Favourable as the climate is, yet there was not wanting some necessity to erect a dwelling, that might prove a better shelter from the descending rains and the blowing tempest, than either the shady tree or the dark excavated rock. Hence the southern genius began to display its strength in the mechanical art of building.

Fertile as the soil is, and numerous as the spontaneous productions are, yet the desire of having a greater quantity of some provisions, or the desire of having them in a season beyond the usual time of their spontaneous production, would induce the ancient islander to invent the means of cultivating and maturing these favourite plants: hence originated the rude beginnings of the science of agriculture. But as these incentives are both few and very feeble, the progress of that science is singularly slow.

A desire of change of food, or the necessity arising from the periodical suspension of vegetable production, naturally induced the islander to betake himself to that animal food which every where surrounded him: hence the invention of the bow and the javelin succeeded to the ruder sling and stone.

The agreeable variety or the convenient supply

from this quarter, induced him to attempt another region, and to invent means to lay on the table the fish that swam around him, as he amused himself with imitating that watery race: hence originated both the fishing boat, the fishing hook and line, together with those lamps, and that oil which they burn during the time of their fishing in the night season. For these islanders have this custom in common with the Neapolitans and Maltese; they fish in the night, and repose themselves in the day; and also, like them, burn torches of the cocoa-nut while engaged in it. The insulated situation of this people would likewise at a very early period suggest the advantage of visiting the inhabitants of the neighbouring islands; and these visits would become more frequent as avarice and the love of power prompted to martial contendings. Hence originated the destructive art of war: nor is it difficult to conceive, that the more violent passions of the human mind, being once embroiled, would suddenly force into the field of battle all the former productions of honourable invention. The various disappointments in military enterprises would induce to strengthen, enlarge, and polish the canoe, and to sharpen the javelin and the arrow; repeated successes would lead to new attempts: the martial productions of enemies would also soon be employed against themselves by the opposite power.

By a similar process of the mind would the various mechanical arts either originate or advance in improvement; and their frequent intercourse with Europeans, as well as the use of their mechanical instruments, will greatly tend to accelerate the progress of these arts among them;

Digitized by Google

though at present they are all in a very rude state.

Nor are the other arts and sciences in great perfection among these southern islanders. Dr. Solander and Sir Joseph Banks, who attended Captain Cook, were at a loss to find the existence of the science of arithmetic among them. They could not ascertain their method of dividing time. When they spoke of time they used the term *malama*, which signifies *the moon*; and they reckon thirteen of these moons, beginning again when they are expired. This fact, however, tends to prove, that they have some idea of the solar year; but these gentlemen could not discover how they computed their months, to make thirteen equal to the year,—as they said, that these months consisted of twenty-nine days, one day in which the moon was invisible being included. Experience, however, shows, that they had a knowledge of the prevailing weather which was to be expected, and also the fruits that would appear in different seasons.

The siences which have for their more immediate object the cultivation of the human mind are rather in a ruder state.

Language is the medium of communicating the thoughts of one mind unto another; and is of two kinds,—natural and artificial: the natural language is composed of those signs by which one untaught savage communicates his ideas to another, or that by which persons of different nations can make their wants, their sorrows, or their joys known to each other. Artificial language is composed of certain signs or words, which different nations have fixed upon to convey their ideas to

Digitized by Google

one another, upon all the various occurrences between man and man.

The names of surrounding objects would first obtain, and next to these the more common necessaries of life and the more common topics of conversation. Correspondent to these remarks, the language of the Southern islanders is very contracted, and abounds chiefly in the names of persons and things.

The specimens of their language conveyed to us by those who have visited these islands show, that it is soft, abounding with vowels, and of easy pronunciation. The contracted use of language, or rather the scanty portion of ideas which are in circulation among them, has evinced the fact, that few of their nouns or verbs are declinable; but future improvement will probably remove that defect. We are, however, informed, that Captain Cook and his companions as well as those who have visited them since their time, found means to make themselves mutually understood.

When the other sciences, the knowledge of which is conveyed by means of language, arrive at greater maturity in these islands, the language will undergo considerable improvements: nor is the period, we hope, far distant, when these shall flourish in those long-neglected regions, and the progress of knowledge unfold numerous facts in the human constitution hitherto undiscovered.

The science of medicine bears an exact proportion to the other sciences. Observations and numerous facts prove, that the natural and rude state is the most favourable for health, and there are many parts of Europe where the physician and the surgeon are not found, nor their absence often deplored. A hardy race living on the scanty

Digitized by Google

produce of their niggard lands, and temperately enjoying the pleasures of social life, are the greatest strangers to those diseases which infest the more luxurious regions. More diseases originate from an improper use of the bounties of Providence, than from a scanty portion of them.

The condition of the southern was similar to that of the northern inhabitants of the world, previously to the arrival of Europeans among them. A temperate climate, a regular mode of life, the frequent use of vegetables, and the sparing use of animal food, tended to preserve health and invigorate the constitution. Their cleanliness and frequent bathing have also their effect,—although, perhaps, in some instances their bathing is carried beyond the bounds of prudence and the strength of the human frame.

But, alas! the case of these uncultivated islanders is sadly changed, and now destroying and depopulating diseases loudly call for medical aid. Intermitting fevers, coughs and colds prevail, occasioned partly by the change of weather, and partly by the pernicious mode of bathing when exceeding warm. When the sun is vertical, and their naked heads are exposed to its perpendicular beams, they sometimes undergo a temporary insanity. The periodical season of this disease is when the bread-fruit is ripe; and probably their excess in the use of that food may aid in bringing on this distemper. It is attended with boils on the skin, and continues longer with some than with others. Similar to the small-pox and some other eruptive distempers in Europe, however, the person once recovered is affected no more.

Digitized by Google

The direful ague also prevails, and is generally fatal, because here is no medicine for its effectual cure. In consequence of their exertions in wrestling, jumping, and lifting, they are subject to grievous ruptures. The glands behind the ears often swell and suppurate, leaving large scars similar to the king's evil. To these they apply no other cure but that of washing. Their active dispositions will not permit them to stay in the house, if they be able to stand upon their feet; nor can any admonition prevail upon them to apply a poultice of any kind, from the prevailing superstition, that none must pass the sacred ground with their heads covered, or any thing above their shoulders. Another circumstance operates to induce them to neglect all medical aid, which is their supposition that no disease attacks them by imprudence or intemperance, but is the just punishment of their divinity for some offence: the natural consequence is, that they trust more to the prayers of priests, than to the medicine of physicians. Their own vigorous constitutions and their natural operations, however, sometimes produce astonishing cures.

The writer of the voyage of the Duff narrates, that "One man had received a musket ball, which passed through his breast and shoulder-blade! another had his arm broken by a ball; a third received it as he was stooping; it passed through his thigh, entered his breast, and came out behind his collar-bone: several others were dreadfully smashed with stones; one had his upper jaw broken inward, with the loss of six or seven teeth, and a part of the bone—and yet all recovered surprisingly soon, without any application. All bandages they abominate, and can-

not bear the smell of the dressings of a wound, running always to the water when any thing of thiskind affects them, and grating sandal wood on the part, to take off the offensive fetor. If they happen to have a leg broken, it usually kills them; not so much from the fracture itself, as from their efforts to crawl to the water, from which nothing restrains them: this often brings on inflammation and mortification, where there could otherwise be no danger. Some bear the scars of the jagged stingray spear passing through their bodies, and are recovered. A broken arm is sometimes completely restored by bamboo splints, as it admits of their going about with it in a sling.

"Our surgeon, in his visits to different parts of the island, added to this catalogue the elephantiasis, which he observed of a prodigious kind, one man's leg being swelled as big as a youth's body; yet he continued going about. There is hardly one of the chiefs but is affected with cuticular diseases, and many like lepers from head to foot, occasioned by drinking the yava; yet they regard this as an honourable distinction, calling it the yava skin rather than a disease. Many have, in the rainy season, considerable inflammation in their eyes; and their children are often subject to a tetterous eruption which continues for a long while. A few have been found affected with the itch; but whether it be communicated or an endemial disease is not certain."

Such are the late accounts of the necessity of medical aid to these insulated tribes. But there is a more woful disease not yet mentioned, which they appear to have received from the Europeans, and it has spread with such rapidity, that a fourth part of the inhabitants seem to be affected with it.

Digitized by Google

The late visitors narrate, that they beheld many miserable objects with horrid and foul ulcers, carious bones, lost limbs, and in the last stage of consumption. Some are separated from their families in an out-house or shed, and not permitted to touch any provisions but what are brought them. Their nearest relations shun them; and though they are not abandoned to starve, they are actually permitted to rot alive.

The cure of this fatal and disgusting disease is earnestly to be wished by every friend of humanity; and it is with peculiar pleasure we add, that every exertion is making to prepare medical assistance for these afflicted people.

The inhabitants of the Southern Isles display but little ingenuity in the construction of their houses. The common people lodge in huts scarcely sufficient to shelter them from the inclemency of the weather. Those of superior rank dwell in more comfortable habitations. The common dwellings are of an oblong form, round at both ends, and the ridge tree is about eighteen feet long. A house of the second order is about twelve feet in height, twenty in breadth, and thirty in length. The houses of the highest order, are in proportion to the taste or wealth of their owners, and some are spacious and considerably elegant.

Their houses resemble European sheds, or thatched roofs, supported by rafters and posts. The floor is raised with earth, gently smoothed, and covered with thick matting. Some have their houses open all round, but they are generally enclosed with strong mats, or branches interwoven in a dexterous manner. Partitions are not in use, yet more decency is observed than

Digitized by Google

might be expected from their general conduct with strangers. Nor can it be denied that many of those acts of indelicacy which have tarnished their character, are chargeable upon the Europeans. Hence it has become proverbial among them, that Englishmen are ashamed of nothing.

But although they have no partitions, there is an enclosed space for the master and mistress of the house, which is formed with a thick mat about three feet broad, bent in a semi-circular form, and placed edge-ways, with the ends touching the side of the house. The rest of the family sleep upon any part of the floor, the unmarried men and women sleeping apart from each other. If the family in the southern region be large, they have little huts adjoining their houses, in which their servants sleep. The whole of their houshold furniture consists of some wooden stools, a few baskets of different sizes, in which they put their combs, fish-hooks, and tools; two or three bowls in which they make their kava, some cocoa-nut shells, a few gourds, and a bundle of cloth. Some have also a large chest on which the master and mistress sleep, and some employ a canoe house, just sufficient for their length, but not high enough for them to stand erect. They now begin to experience the advantage of bed-steads, and the demand for them greatly increases. Their pillow is a little wooden stool, neatly wrought out of one block; and those who are unprovided with one, use the stool on which they sit in their canoes. They usually sit cross-legged on the ground, but commonly have seats for the accommodation of strangers.

Digitized by Google

Their houses are full of fleas, which appear to originate from the warmness of the climate and their own negligence; but the natives assert, that they received them from Europe. The common people have usually no other bed-clothes than those they wear, which, in that warm climate, are few in number.

Greater ingenuity is displayed in constructing their canoes, which may be properly deemed the most perfect of their mechanical productions. The double canoes are capable of carrying about fifty persons, and sail with great rapidity. They are built of the bread-fruit tree, and the workmanship is so extremely neat, that they bear the external appearance of one solid piece; but upon a closer inspection, they are found to consist of a great number of planks, exactly fitting each other, and by means of a ledge on the inside, are secured together with cocoa-line. The single canoes are formed with an out-rigger. Unacquainted with the method of warping a plank, they shape their canoes with the hand.

Two kinds of canoes are used; the one called *Ivahahas*, and the other *Pahies*: the former is used for long, and the latter for short voyages. These vessels are similar in shape, but not proportionate, being from sixty to seventy feet in length, and not more than the thirtieth part in breadth. Some are employed in going from one island to another, and others in fishing.

The *Ivahahas* are also used for war. These are the longest; and the head and stern are considerably above the body. When going to sea, they are fastened together, side by side, at the distance of a few feet, by strong wooden poles, which are laid across them, and joined to each side. A plat-

Digitized by Google

form of ten or twelve feet long is raised upon the fore part, on which the fighting men stand, whose missive weapons are slings and spears. The rowers are placed beneath, to supply the place of the wounded.

The fishing canoes are from ten to thirty or forty feet long. The travelling canoes have a small house on board, for the better accommodation of those of higher rank, who occupy them both night and day.

The canoes called *Pahies* vary in size, being from sixty to seventy feet long, and sometimes very narrow. The natives employ these for fishing, and sometimes for long voyages. They are very useful in landing, and also in putting off from the shore in a surf; for, by their great length and high stern, they can land dry, when the English boats can scarcely land at all. In going from one island to another, these islanders are sometimes a month, and sometimes fourteen or twenty days; and if they could carry sufficient provisions with them, they would stay much longer.

The method of constructing these canoes is singularly curious. The principal parts are separately formed without either saw, plane, chissel, or any iron tool. These parts being prepared, the keels are fixed upon the blocks, and the planks are supported with props, till they are joined together with strong plaited strings, which are passed several times through holes bored with a chissel or bone, such as they commonly use; and when finished, they are sufficiently tight without caulking. These boats are preserved with great care, in a kind of shed prepared for the purpose.

The only tools used in the construction of their

Digitized by Google

canoes, are hatchets of a smooth black stone, augers made of sharks teeth, and rasps composed of the rough skin of a fish fastened on flat pieces of wood. The same tools are employed for all other kinds of work, and except a chissel made of the bone of a man's arm, and shells which serve them for knives, they have no other instruments.

Their cordage is composed of the fibres of the cocoa-nut husk, which, though not ten inches long, they plait, about the thickness of a quill, to whatever length may be required, and roll it up into balls; and by twisting these together, form their ropes of a considerable size. Their fishing lines are not inferior to those of Europe, either for strength or smoothness. Their small hooks are of pearl shell; but the large ones are only covered with it on the back, and the points are generally of tortoise shell. With the large ones they catch albicores and bonettoes, by putting them to a bamboo rod, about twelve feet long, with a line of the same length. They have also a number of small seines, some of which are of the most delicate texture.

The general employment of the women is not fatiguing, and it is usually performed in the house. The making of cloth is entirely entrusted to their care; and this article is the chief manufacture of Otaheitee. The bark of the mulberry, the bread-fruit, and a tree which bears some resemblance to the West-Indian wild fig-tree are employed for this purpose. From the first of these is manufactured the finest cloth, which is seldom worn but by those of high rank. The second sort is made from the bread-fruit tree; the third of that tree which resembles the wild fig: and it is a singular fact that the last of these, though coarsest, is scarcer

Digitized by Google

than the other two, because manufactured in smaller quantities.

The mode of manufacturing these different sorts of cloth is the same. The bark of the tree is stripped off and soaked in water for two or three days; then the inner bark is separated from the external coat by scraping it with a shell; after which it is spread out upon plantain leaves, placing two or three layers over one another, care being taken to make it of an equal thickness in every part. In this state it is allowed to remain until almost dry, when it adheres so strongly, that it is taken from the ground without breaking. This process being finished, it is laid on a smooth board and beaten with an instrument made for that purpose of the compact heavy wood called *Etoa*. This instrument is about fourteen inches long, and seven in circumference, of a quadrangular shape; and each of the four sides is marked with longitudinal grooves, or furrows, differing in this particular, that there is a regular gradation in the width and depth of the grooves on each of the sides,—the coarser side not containing more than ten of these furrows, and the finest side above fifty.

The progress of this manufacture is also gradual. They begin with that side of the mallet where the grooves are deepest and widest, and proceed regularly, finishing with that which has the greatest number. By this operation the cloth is extended, in a manner similar to gold formed into leaves by the hammer: it is also marked with small channels resembling those which are visible on paper, but rather deeper. They generally beat this very thin; but when they wish to make it a little thicker, they unite two or three pieces together, with a kind of glue prepared from a root called *Reá*,

Digitized by Google

This cloth is capable of being rendered very white by bleaching, and also may be died red, yellow, brown, or black. The first of these colours is exceedingly beautiful, and equal, if not superior, to any in Europe. The red is formed from a mixture of the juices of two vegetables, neither of which separately used produces the same effect.

This people also excel the Europeans in manufacturing various kinds of matting. During the rainy season, they wear the finest kind of it, and they use the coarse kind to sleep on. They excel also in basket or wicker work, which both men and women frequently make of different patterns.

They make ropes and lines of all sizes of the bark of the Poerou tree, and their nets for fishing are wrought of these lines; of the fibres of the cocoa nut they make thread, with which they fasten their canoes: the sizes of these are various according to their respective uses. Their fishing lines are made of a kind of nettle that grows in the mountains, and are sufficiently strong for taking very large fish; in which art the inhabitants of this part of the globe display great ingenuity.

Among the southern islands the sphere of agriculture is very contracted, yet according to its extent, it is in very tolerable perfection. In those parts where spontaneous productions afford food for the inhabitants, agricultural exertions are very feeble; but where the inhabitants live upon cultivated roots and nursed fruits, they are more vigorous. In the management of yams and plantains, considerable ingenuity is displayed: small holes are first dug for their reception; and they afterwards root up the surrounding grass.

When they plant their vegetables, they observe

such exactness, that in all directions the rows present themselves to the eye complete, and regular. The bread-fruit and the cocoa-nut are dispersed without any order, and when arrived at a certain height, require no farther cultivation. Similar is their culture of another large tree producing a roundish compressed nut, called *Eeefee*, and of a smaller one bearing an oval nut, with two or three triangular kernels. There is another plant called *Kappe*, which is regularly planted, and in large plots. The *Mawhaha*, the yams and the *Jeejee* are usually interspersed among other roots; the sugar cane is planted in small spots, and closely crowded. It often grows spontaneously, of a size equal to any in the Indies; and if cultivated, it would probably grow both longer and richer: but the natives make little use of it, unless to chew while they are travelling. So negligent are they, indeed, of this valuable plant, that when it grows tall, they set it on fire to clear the land. The mulberry, of which the cloth is made, has a large space allowed for its growth, and is kept very clean. The *Pandalus* is commonly planted in rows close together at the sides of the fields. The cabbage tree grows in the mountains, but to no great perfection, and the natives seldom use it.

In many parts they have also laid out their grounds with some small degree of elegance; for the divisions are very regular, and the fences strong and well placed. Many of the plantations also are more beautiful and better arranged than could have been expected from the rude state of the inhabitants.

END OF VOL. X.

Bryer, Printer, Bridge-Street, Blackfriars.

Digitized by Google

Digitized by Google

Digitized by Google